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COVERBS AND CASE IN VIETNAMESE

by

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PREFACE

My interest in the Vietnamese language stems from a five-and-one-half-year residence in Viet-Nam, two-and-one-half in Saigon and three in Hue. During this time, Vietnamese people of all ages and walks of life warmly shared with me their language and culture, their food and their homes, their love, their laughter, their hurt. Out of this very personal experience and a happy attachment to linguistic research, this dry and impersonal treatise was conceived.

When the work was first undertaken, it was my intention to confine my investigation to the functions of the Vietnamese coverb *cho*, which seem to be several and complex. However, it was necessary first to look at the problems of coverbs in general, and these investigations made it clear that the problems of coverbs needed broad interpretation before specific problems of *cho* could be examined with any understanding. Thus, this work is intended to be that broad interpretation.

The work is presented here exactly as it was presented to the Graduate Division of the University of Hawaii in partial fulfilment of the requirements for the Ph.D. degree in Linguistics in May 1975. None of the questionable interpretations of data or the many little problems needing clarification have been clarified. None of the theoretical claims have been adjusted to accord with my more recent thinking. In short, all the niggling little inadequacies of a hastily "completed" work remain as they were.

Many of the sentences used for analysis and as examples were taken from letters received from Vietnamese friends. Needless to say, names have been changed to protect the identity of the correspondent. In Honolulu, I was given direct assistance by Vietnamese friends. I want especially to express my gratitude to Professor Nguyen Dang Liem, my friend, my teacher, and my colleague in the investigation of Vietnamese syntax. Professor Liem gave many hours so that we could examine and analyse Vietnamese sentences together. He also read through several

drafts of the work, making helpful comments. Finally, he was instrumental in the publishing of the work. Also very helpful to me in determining the grammaticality of sentences were Mrs Diep Nguyen Dang Liem, Mrs Huong Crumpton, and my dear friend Mrs Ton-nu Kim-Chi, who willingly spent much time helping me and who so often was quick to see and follow the line of my inquiry.

In analysing Khmer sentences, I was extremely fortunate in having the help of Madame Saveros Pou (Lewitz), whose skill as a linguist gives her an excellent perspective on her native language, Khmer. Madame Pou, of the Centre National de la Recherche Scientifique of Paris, was in Honolulu for two months in the spring of 1974 doing research work. During that period, she gave generously of her limited time to discuss Khmer problems with me. In the summer of 1972, during a brief visit to Southern Illinois University, I was also given help in Khmer by Mr Thach Sarun of the Center for Vietnamese Studies.

It would be impossible to count the hours or assess the skilled assistance and personal encouragement given to me by my dear friend and graduate colleague at the University of Hawaii, Dr Pranee Kullavanijaya, who was on leave from Chulalongkorn University in Bangkok. We spent many hours together analysing Thai sentences and discussing general syntactic theory. Without her friendship and assistance, there would be a big hole where the Thai section now is, as well as many smaller holes throughout the work.

Professor Li Ying-Che, of the University of Hawaii, read through and commented on the theoretical sections and the Chinese chapter. Professor Andrew Pawley, also of the University of Hawaii, gave me valuable criticism on the historical section, resulting in several changes.

Finally, but certainly foremost, had it not been for my friend and mentor, Professor Stanley Starosta, it is questionable whether this project would ever have gotten off the ground. And that would have been sad, for I have thoroughly enjoyed every bit of this investigation, even the trying frustrations, the overturning of premature convictions, and the arguments with Professor Starosta over theory, most of which I lost. Professor Starosta seemed always available for discussion. His insights into syntactic theory, his pioneering efforts in the Lexicase grammatical model, and his deep interest in natural languages, especially those of Southeast Asia, have been invaluable to me in my researches. He read all the many drafts of the work and proved himself many times over to be a person of excellent patience and humour.

Mrs Satoko Lincoln, with care and intelligent criticism, typed the final copy.

It would be a mistake to overlook two people who were instrumental in my getting into linguistics in the first place: Professor Herbert Paper, of the University of Michigan, who introduced me to the exciting possibilities of linguistics, and Professor Laurence C. Thompson, of the University of Hawaii, who was responsible for my studying linguistics at the University of Hawaii and who guided me through my first years there.

Marybeth Clark

Honolulu

January 1976

TABLE OF CONTENTS

	<i>Page</i>
<i>Preface</i>	iii
List of Charts	xi
 Chapter I: INTRODUCTION	
1.1 Goals	1
1.2 The Languages	3
1.3 Transcriptions Used in This Study	3
1.3.1 Vietnamese Orthography	3
1.3.2 Khmer, Thai, and Mandarin Transcriptions	5
1.4 Sources for Language Data	5
1.4.1 Sources for Vietnamese Language	5
1.4.2 Sources for Khmer Language	5
1.4.3 Sources for Thai Language	6
1.4.4 Sources for Mandarin Chinese	6
 Chapter II: THEORETICAL FRAMEWORK	
2.1 Theoretical Background	7
2.2 Lexicase	8
2.2.1 The Model	8
2.2.2 Properties of Case Frames	9
2.2.3 Properties of Derivation Rules	11
 Chapter III: CASE IN VIETNAMESE	
3.0 Introduction	13
3.1 Phrase Structure	13
3.2 Vietnamese Case Relations and Case Forms	14
3.2.0 Introduction	14

3.2.1	Case Relations	15
3.2.1.0	Introduction	15
3.2.1.1	AGENTIVE	17
3.2.1.2	OBJECTIVE	17
3.2.1.3	DATIVE	18
3.2.1.4	LOCATIVE	18
3.2.1.5	INSTRUMENTAL	18
3.2.1.6	COMITATIVE	19
3.2.1.7	BENEFACTIVE	19
3.2.1.8	TIME	19
3.2.2	Case Forms	19
3.2.2.0	Characteristics of Case Forms	19
3.2.2.1	The Nominative Case Form: [+NM]	20
3.2.2.2	The Accusative Case Form: [+AC]	21
3.2.2.3	The [+D] Case Form	24
3.2.2.4	The [+L] Case Form	25
3.2.2.4.1	The Location Sub-CF: [+lcn]	25
3.2.2.4.2	The Source Sub-CF: [+src]	27
3.2.2.4.3	The Goal Sub-CF: [+gol]	29
3.2.2.4.4	The Terminus Sub-CF: [+ter]	31
3.2.2.5	The [+I] Case Form	33
3.2.2.6	The [+C] Case Form	33
3.2.2.7	The [+B] Case Form	34
3.2.3	Locative Relator Nouns	35
3.2.4	Summary of CR and CF Cooccurrences	41
3.3	Classification of Verbs	42
3.3.0	Introduction	42
3.3.1	Basis of Classification	42
3.3.2	[+voluntary] Verbs	43
3.3.3	Semantic Features and Case Frames	43
3.3.4	Inner and Outer Cases	45
3.3.4.1	Inner LOCATIVE and Outer LOCATIVE	45
3.3.4.2	DATIVE and BENEFACTIVE	47
3.3.5	The Verb Classes in Vietnamese	51
3.3.5.1	AGENTIVE-DATIVE Verbs	51
3.3.5.1.1	AGENTIVE-DATIVE-Goal Verbs	51
3.3.5.1.2	AGENTIVE-DATIVE-Source Verbs	56
3.3.5.2	AGENTIVE-LOCATIVE Verbs	59
3.3.5.2.1	AGENTIVE-LOCATIVE-Goal Verbs	59
3.3.5.2.2	AGENTIVE-LOCATIVE-Source Verbs	63
3.3.5.2.3	AGENTIVE-LOCATIVE-Location Verbs	64
3.3.5.3	AGENTIVE Verbs	67

3.3.5.4	OBJECTIVE-LOCATIVE-Goal Verbs	68
3.3.5.5	OBJECTIVE-LOCATIVE-Source Verbs	72
3.3.5.6	OBJECTIVE-LOCATIVE-Location Verbs	73
3.3.5.7	OBJECTIVE Verbs	73
3.3.6	Summary of Vietnamese Verb Classes	75
Chapter IV: COVERBS		
4.1	Background and Definition	76
4.2	The Coverb Problem	78
4.3	Analyses of Chinese Coverbs	79
4.3.1	Yuen Ren Chao	79
4.3.2	Anne Y. Hashimoto	80
4.3.3	Ying-che Li	83
4.3.4	Charles T.C. Tang	83
4.3.5	Shou-Hsin Teng	84
4.3.6	James Chao-Ping Liang	85
4.3.7	Charles N. Li and Sandra A. Thompson	88
4.3.8	Summary of Analyses of Chinese Coverbs	90
Chapter V: COVERBS IN VIETNAMESE		
5.0	The Coverb Problem Restated	92
5.1	Locative Verbs as Case Markers	93
5.1.0	Introduction	93
5.1.1	Vietnamese Locative Coverbs	93
5.1.2	Other Potential Locative Coverbs	98
5.1.3	Adverbial Uses	100
5.2	Previous Solutions for Vietnamese	101
5.2.0	Introduction	101
5.2.1	Laurence C. Thompson	101
5.2.2	Nguyễn Đình-Hòa	102
5.2.3	Nguyễn Đăng Liêm	105
5.2.4	Donna Ha	108
5.2.5	Trần Trọng Hải	109
5.3	Analysis Proposed in This Study	110
5.3.0	Introduction	110
5.3.1	Locative Coverbs as Prepositions	110
5.3.2	Case Frames for Locative Verbs	114
5.3.3	Coverbs in the Lexicon	117
5.4	The Dative Coverb in the Lexicon	123

Chapter VI: COVERBS IN SOUTHEAST ASIAN LANGUAGES - IMPLICATIONS FOR FURTHER INVESTIGATION

6.1	The Areal Hypothesis	127
6.2	The Evidence	128
6.2.0	Introduction	128
6.2.1	Khmer	129
6.2.1.1	Coverbs, Prepositions, and Relator Nouns	129
6.2.1.1.1	Khmer Coverbs	129
6.2.1.1.2	Khmer Prepositions	137
6.2.1.1.3	Khmer Locative Relator Nouns	138
6.2.1.2	OBJECTIVE-LOCATIVE Verbs in Khmer	140
6.2.1.3	AGENTIVE-LOCATIVE Verbs in Khmer	142
6.2.1.4	AGENTIVE-DATIVE Verbs in Khmer	145
6.2.2	Thai	150
6.2.2.1	Coverbs, Prepositions, and Relator Nouns	150
6.2.2.1.1	Thai Coverbs	150
6.2.2.1.2	Thai Prepositions	160
6.2.2.1.3	Thai Locative Relator Nouns	161
6.2.2.2	OBJECTIVE-LOCATIVE Verbs in Thai	164
6.2.2.3	AGENTIVE-LOCATIVE Verbs in Thai	166
6.2.2.4	AGENTIVE-DATIVE Verbs in Thai	169
6.2.3	Comparison of Three Languages	172
6.2.3.1	Cross-Language List of Coverbs	172
6.2.3.2	CR and L Sub-CF Cooccurrences	174
6.2.3.3	Comparison of Verb Classes and Case Frames	175
6.2.3.4	Apparent Counterexamples to the Coverb Derivation Hypothesis	177

Chapter VII: THE HISTORICAL HYPOTHESIS

7.0	Introduction	181
7.1	Coverbs as a Stage in the Derivation of P from V	182
7.2	Modern Vietnamese Prepositions	183
7.3	Evidence in Support of the Hypothesis of Ps Deriving from Vs	186
7.3.0	Introduction	186
7.3.1	Verbs, Adverbs, and Prepositions in Pacific Languages	187
7.3.2	Verbs and Prepositions in Mandarin Chinese	188
7.3.3	Verbs and Prepositions in West African Languages	190
7.3.4	Conclusion	191
7.4	Conditions for the Derivation of P from V	191

Chapter VIII: SUMMARY AND CONCLUSIONS	
8.0 Objectives of Work	194
8.1 Description of Vietnamese Coverbs	194
8.2 The Coverb as Preposition	195
8.2.1 In the Lexicon	195
8.2.2 In the Classification of Verbs	195
8.3 Lexicase and Coverbs	197
8.4 Coverbs in Southeast Asia	198
8.5 Problems for Further Investigation	199
APPENDIX: Abbreviations	202
BIBLIOGRAPHY	205

LIST OF CHARTS

<i>CHART</i>		<i>Section</i>	<i>Page</i>
III-1	Locative Feature Tree	3.2.1.0	15
	(repeated	3.3.4.1	47)
III-2	CR and CF Cooccurrences	3.2.4	41
III-3	Verb Semantic Feature Tree	3.3.3	44
III-4	Semantic Tree of Ten [+voluntary] Verb Classes in Vietnamese	3.3.6	75
IV-1	Comparison of Chinese Solutions for Coverbs	4.3.8	91
VI-1	Cross-Language List of Coverbs	6.2.3.1	173
VI-2	Comparison of CR and L Sub-CF Cooccurrences in Vietnamese, Khmer, and Thai	6.2.3.2	175
VI-3	Comparison of Verb Class Case Frames	6.2.3.3	176
VIII-1	Cooccurrences of Coverbs and Verb Classes	8.2.2	196

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CHAPTER I

INTRODUCTION

1.1 GOALS

In the Vietnamese language, there is a set of words which can occur as main verbs in a sentence but can also, in other sentences, occur in exocentric construction with a noun phrase, seeming to have a prepositional function in the construction. When these words occur in their prepositional function, they are called "coverbs" in this study.

The principal purposes of this study are as follows.

1. To describe and illustrate the behaviour of coverbs in Vietnamese.
2. To determine the syntactic role of coverbs and their role in the classification of verbs in Vietnamese. In considering this problem, I will assume that a grammar that captures all syntactic generalisations will have to establish certain syntactic categories which may be labelled by such traditional terms as verb, preposition, and noun; and that these categories will be comparable across languages. Further, as "preposition" is defined in this study, it functions as a case marker. The first question concerning coverbs is whether they should be categorised as verbs or prepositions. If they are verbs, it must be determined whether they are main verbs, embedded verbs, or verbs in series in a simple sentence, and whether a verb can function like a case marker and still be a verb. If they are prepositions, it must be determined whether the corresponding verb and preposition are a single lexical item which can be marked both [+V] and [+P] in the lexical entry, two separate unrelated lexical items, or two lexical items related by derivation.
3. To determine how the syntactic role of coverbs can be stated in the grammar in a way that is both explicit and intuitively satisfying. To this end, to apply a case grammar framework which can
 - a. adequately describe the behaviour of coverbs;
 - b. demonstrate the syntactic relationships between verbs,

- prepositions, and nouns;
- c. yield a satisfying classification of verbs according to their occurrence with coverbs;
- d. show the relation between coverbs and their corresponding verbs; and
- e. predict the grammaticality of coverb sentences.

4. To make a cursory investigation into coverb phenomena in other Southeast Asian languages to see how such a comparison can give support to, or reveal weaknesses in, the proposed solution for Vietnamese, and to suggest directions for further comparative investigations.

A brief look at Chinese coverbs will illustrate their behaviour (Sec. 4.1) and various solutions to the coverb problem given in analyses of Chinese coverbs (Sec. 4.3).

Previous solutions for Vietnamese coverbs will be given in Sec. 5.2. It will be hypothesised in this study that coverbs are prepositions (as defined in Sec. 3.1) which are related by derivation to their corresponding verbs (Sec. 5.3). General theoretical claims will be made regarding the relationship between verbs and prepositions and regarding the verbal characteristics of prepositions (Secs. 2.2.2, 3.1, and 5.3). In this regard, it will be claimed that the derivation of coverbs from verbs is a stage in a general historical process in which certain kinds of verbs become prepositions (Chap. VII). Further claims will be made regarding the nature of derivation and derivation rules (Sec. 2.2.3).

The solution proposed in this study makes use of "lexicase", the theoretical model described in Chapters II and III. This model attempts to account for the facts within the framework of a case grammar in which relationships between sentences are shown by features on lexical items and whose generalisations are stated in the form of lexical derivation and redundancy rules which operate on these features. The model is tested for its ability to account for the coverb phenomenon (Sec. 3.2.2, Sec. 5.3, Sec. 5.4, and Chapter VI).

The Southeast Asian languages Khmer and Thai will be shown to share with Vietnamese the coverb phenomenon (Sec. 6.2). One intention here is to suggest the possibility of coverbs in Southeast Asia being an areal feature, that is, a characteristic spread through languages of the area by language contact (Sec. 6.1).

Pertinent literature on the topic of coverbs is referenced throughout the text, especially in Chap. IV and Secs. 5.2 and 7.3.

1.2 THE LANGUAGES

Vietnamese is generally believed to be a member of the Austroasiatic language family (see, for example, Haudricourt 1953 and 1966). It is closely related to Muong, a language spoken in mountain areas of parts of northern Viet-Nam (Thompson 1967). Vietnamese is spoken by approximately 24 million people in the country of Viet-Nam, along the eastern and southern coastal area of the Indochinese peninsula. There are three major dialect areas: North, North-Central, and South (including South-Central), though dialect differences are not great. The dialect used in this study is generally the Southern dialect, although it is assumed that the problem under discussion does not exhibit significant dialect difference.

Khmer (Cambodian), the official language of the Kingdom of Cambodia, is a member of the Mon-Khmer language group of the Austroasiatic languages. It is spoken by almost six million people in Cambodia and in parts of northeastern Thailand and southern Viet-Nam (Huffman 1970:ix).

Thai (Siamese) is a Tai language. It is generally supposed that the Tai languages are related to the Kam-Sui languages. Whether the Kam-Tai group belongs to the Sino-Tibetan language family is uncertain. The works of Paul Benedict (e.g. 1966) place it in a group he calls Thai-Kadai, which, with Austronesian, belongs in a larger group, Austro-Thai. Thai, the official language of the Kingdom of Thailand, is spoken by approximately twenty million people in the country of Thailand.

Mandarin Chinese is the Chinese language used in this study. The Chinese languages belong to the Sino-Tibetan language family. "Mandarin Chinese is, indeed, a notion difficult to define, as it represents a group of dialects, of which the most prominent is Pekinese" (Liang 1971:4). It is the official language in both mainland China and Taiwan and is spoken by some 500 million people in China and elsewhere.

1.3 TRANSCRIPTIONS USED IN THIS STUDY

1.3.1 VIETNAMESE ORTHOGRAPHY

Standard Vietnamese orthography is used in the Vietnamese examples. Below is given approximate pronunciation of the written alphabet (information taken largely from Nguyen D-H 1966:ix-xiv). Unless otherwise noted, characterisations are Southern pronunciation. Northern and Central pronunciations are indicated by No and Cen respectively.

a	a:, ə/___ch,nh	ng	} η, -ŋm/u,ô,o___
ã	a	nggh-	
â	ə	nh	ŋ-, -n No: ɲ
b-	β	o	ɔ, aw/___ng
c	k, -p̄k/u,ô,o___	ô	o, əw/___ng
ch	c-, -t No: -c	σ	ʎ
d-	ɣ No: z	-p	p
đ	ɗ	ph-	f
e	ɛ, ɛə/___#	qu-	w, kw
ê	e, ə/___C	r-	r No: z Cen: ʒ
g- } gh- }	g, ɣ	s-	ʃ No: s
gi-	ɣ No: z	t	t-, -k
h-	h	th-	tʰ
i	i, ɨ/___ch,nh	tr-	tʰ No: c
k-	(see c)	u	u
kh-	x, h	ʊ	w
l-	l	v-	by, ɣ No & Cen: v
m	m	x-	s
n	n (-ŋ)	y	i:
		oa	wa

Tone diacritics:

a	high-mid level	
á	high rising	Cen: mid rising
â	mid rising	low with glottal stop
ã	mid rising No: with glottal stop	low with glottal stop
à	low falling	mid falling/high-mid level
ạ	low dipping with glottal stop	low (falling)

Hyphenated words in Vietnamese sentences are either Sino-Vietnamese compounds, e.g. kỷ-niệm 'souvenir' and phi-trường 'airport', or what are glossed for the sake of convenience as syntactic units. The latter group includes ông-ấy ('grandfather, Sir, Mr' + 'that') = 'he (respectful)', cô-ấy ('paternal aunt, Miss, female teacher' + 'that') = 'she',

and bao-giờ ('how much' + 'hour') = 'when'.

1.3.2 KHMER, THAI, AND MANDARIN TRANSCRIPTIONS

The Khmer and Thai writing systems use Indic scripts. The romanised transcription used here for Khmer follows fairly closely (minus diacritics on vowels) that of Franklin Huffman in his *Modern Spoken Cambodian* (1970). The system of transcription used for Thai is that used by Pranee Kullavanijaya in her dissertation, *Transitive Verbs in Thai* (1974).

There exist several widely-used romanisations of Chinese written characters. The one used here is the one which is widely used on the Chinese mainland (DeFrancis 1963:xviii) and called pīnyīn. (DeFrancis 1963:461-6 gives a comparative transcription table for pīnyīn and the Yale and Wade-Giles romanisations.)

1.4 SOURCES FOR LANGUAGE DATA

1.4.1 SOURCES FOR VIETNAMESE LANGUAGE

The Vietnamese dialect used in this study is generally the Southern dialect, although sentences from Northern and Central speakers are also used. As stated in Sec. 1.2 above, dialect differences in Vietnamese seem not to be syntactically significant.

My five-and-a-half year's residence in Viet-Nam - two and one half in Saigon and three in Hue - and extensive association with Vietnamese speakers provided a sound basis for a speaking knowledge of the Vietnamese language. Specific data for this study was drawn from my own observations; from references listed in the bibliography and cited in the text of this work, especially the works of Nguyễn-Đặng Liêm, Nguyễn Đình-Hòa, and Laurence C. Thompson; from letters from Vietnamese friends; and from direct assistance from individuals, principally Mr Nguyễn-Đặng Liêm and Mrs Diệp Nguyễn-Đặng-Liêm, both native speakers of Saigon dialect, Ms Tôn-nữ Kim-Chi, a native speaker of Hue dialect, and Mrs Hương Crumpton, a Hue dialect speaker.

Extensive use was made of Nguyễn Đình-Hòa's *Vietnamese-English Dictionary* (1966), for sentences and grammatical information as well as for glosses.

1.4.2 SOURCES FOR KHMER LANGUAGE

The primary source for Khmer sentences was Franklin Huffman's teaching manual of modern spoken Cambodian (1970), which was also very useful for grammatical analysis. Also used were Madeline Ehrman's grammatical

sketch of Cambodian (1972); Huffman's comparison of Thai and Cambodian syntax (1973); and, to a lesser extent, Judith Jacob's *Introduction to Cambodian* (1968).

Personal assistance in analysis of sentences came from Madame Saveros Pou (Lewitz) of the Centre National de la Recherche Scientifique of Paris, a professional linguist and a native speaker of Phnom Penh Khmer, who was in Honolulu for two months doing research work. Data was also obtained from Mr Thach Sarun of the Center for Vietnamese Studies at Southern Illinois University during the summer of 1972.

1.4.3 SOURCES FOR THAI LANGUAGE

The Thai dialect used in this study is that of central Thailand, officially considered to be the national language of Thailand (Kullavanijaya 1974:15).

Written material from which data was drawn includes Marvin Brown's teaching manual of the Thai language (1967), Mary Haas' Thai-English dictionary (1964), Franklin Huffman's syntactic comparison of Thai and Cambodian (1973), Pranee Kullavanijaya's dissertation on transitive verbs in Thai (1974), Richard Noss' *Thai Reference Grammar* (1964), and Vichin Panupong's book on Thai sentences (1970).

By far the greatest amount of data and grammatical analysis came from consultation with Dr Pranee Kullavanijaya, a professional linguist on leave from Chulalongkorn University in Bangkok and a native speaker of Bangkok Thai.

1.4.4 SOURCES FOR MANDARIN CHINESE

No separate analysis of Mandarin Chinese coverbs is attempted here; simply a description of coverbs and an exposition of other analyses are set forth.

Most of the data came from the sources discussed in Sec. 4.3, Analyses of Chinese Coverbs. Also helpful was John DeFrancis' *Beginning Chinese* (1963). Some sentences were taken from Charles Hockett and Chaoying Fang, *Spoken Chinese* (1945).

CHAPTER II

THEORETICAL FRAMEWORK

2.1 THEORETICAL BACKGROUND

This study will assume to be correct Fillmore's claim that there is a finite and universal set of relationships holding between a predicate and its associated nominals such that every nominal constituent of a sentence is related in a particular way to the predicate: "for the predicates provided in natural languages, the roles that their arguments play are taken from an inventory of role types fixed by grammatical theory" (Fillmore 1971a:376). These relationships he calls case relationships. He states (1968:27) that lexical entries for verbs contain 'frame features' which "will indicate the set of case frames into which the given verbs may be inserted. These frames have the effect of imposing a classification of the verbs in the language."

He listed (1968:24-5) the following cases as probably necessary:

Agentive: "the case of the typically animate perceived instigator of the action identified by the verb;"

Instrumental: "the case of the inanimate force or object causally involved in the action or state identified by the verb;"

Dative: "the case of the animate being affected by the state or action identified by the verb;"

Factitive: "the case of the object or being resulting from the action or state identified by the verb, or understood as part of the meaning of the verb;"

Locative: "the case which identifies the location or spatial orientation of the state or action identified by the verb;"

Objective: "the semantically most neutral case, the case of anything represented by a noun whose role in the action or state identified by the verb is identified by the semantic interpretation of the verb itself...The term is not to be confused with the notion of direct object, nor with the name of the surface case synonymous with accusative."

Except for Factitive, these cases are discussed in detail in Sec. 3.2.1, Vietnamese Case Relations. Also considered relevant and discussed in

Sec. 3.2.1 are other cases which Fillmore has suggested in other works and lectures: Benefactive, Comitative, Time, Source, Goal, Direction, and Extent. Other possible cases, such as Manner, Purpose, etc., are not investigated in this study.

Case relationships, hereafter referred to as case relations (CR), may be realised overtly in a variety of ways. The ways include 1) affixation or suppletion of the noun or pronoun, 2) addition of prepositions or postpositions, 3) sequential ordering, and 4) marking on verbs (Fillmore 1968:32). It is normal for a single case relation to be realised in different ways, and for a single realisation to be associated with different CRs; that is, for instance, CRs may be neutralised, as in subjectivisation, which "results in a neutralization of underlying case distinctions to a single form, usually called the 'nominative'" (Fillmore 1968:49). Although Fillmore uses the term "case form" to refer only to case markers of types 1 and 2 above, I will consider a case form (CF) to be a feature which characterises a syntactically significant set of one or more case markers in a given language, and CF features to be drawn from a finite universal set.

Fillmore states that verbs are distinguished from each other not only by specification of case frames but also by "transformational properties". He gives the following examples (1968:28-9):

- "(a) the choice of a particular NP to become the surface subject, or the surface object, wherever these choices are not determined by a general rule;
- (b) the choice of prepositions to go with each case element, where these are determined by idiosyncratic properties of the verb rather than by general rule; and
- (c) other special transformational features, such as, for verbs taking complements, the choice of specific complementizers..."

2.2 LEXICASE

2.2.1 THE MODEL

The syntactic model used in this study to describe and explain the facts of Vietnamese coverbs is one called "lexicase", a framework which has been developed by Stanley Starosta and Harvey Taylor, applied by Taylor in his dissertation on case in Japanese (Taylor 1971), and refined by Paul Li (1973) and Pranee Kullavanijaya (1974).

The lexicase model consists of a language-specific base component composed of Phrase Structure (PS) rules, a lexicon, and a phonological component. The lexicon consists of lexical entries which are specified for grammatical category features, case form features (where appropriate), idiosyncratic syntactic features, semantic features, and phonological representation; and lexical subcategorisation rules, redundancy

rules, and derivation rules, which operate on lexical entry matrices to produce lexical items. Case frame and all other syntactic features are specified for lexical items by redundancy rules which operate directly or indirectly on semantic features. The lexical items are inserted into the trees generated by the phrase structure rules giving syntactic representations which provide the phonological component with "all the syntactic and lexical information necessary for it to produce from them the appropriate phonological representations" (Taylor 1971:10-11).

At the present state of linguistic theory, language universals are far from being fully determined. However, it is expected that, in time, we will be able to write grammars which state only those features and rules which are language specific, leaving out those which are specified in the universal grammar and are therefore redundantly specified in particular grammars. I assume that the concepts of case relation and case form and the categories, features, and many of the rules pertaining to case belong to a universal grammar.

Acceptability or nonacceptability of sentences on the basis of situational context, presupposition, and one's belief or knowledge about the real world is considered to be outside the realm of the lexicase model, that is, outside the realm of syntax. Only those semantic properties which affect grammatical relationships are considered to be syntactically relevant: "This model treats as 'grammatical' or syntactic only those language generalizations which can be described as the direct consequence of relationships obtaining between lexical categories" (Taylor 1971:9).

2.2.2 PROPERTIES OF CASE FRAMES

The lexical item matrices of verbs contain grammatically relevant selectional features, which include the set of case frames into which a given verb may be inserted. A lexicase model case frame differs substantially from a Fillmore case frame in several ways:

1) Instead of a single case frame feature such as +[O(I)(A)] for the verb *open* (Fillmore 1968:27), lexicase has a separate feature for each sister case relation, as shown in the following case frame.

open

+	<u> </u>	[+OBJ]
+	<u> </u>	([+INS])
+	<u> </u>	([+AGT])

This type of formulation permits separate manipulation in terms of co-occurrence restrictions; for example, separate statements can be made regarding the different case forms with which Instrumental and Agentive

can occur. It also permits ordering restrictions to be stated in the redundancy rules, which allows the universal rules to generate strings in any order and language-specific rules to exclude bad orders, showing that case configurations are universal but word order is language-specific. This eliminates the need for establishing an artificial underlying word order and unmotivated scrambling transformations. Finally, such a formulation captures important generalisations. Generalisations include a) prediction of the occurrence of one case in terms of the presence of others so that only unpredictable ones must be listed in the lexicon; b) statement in derivational rules of those parts of the case frame that get altered, with assumption that the rest are unchanged; and c) ordering of topicalisation and subjectivisation without transformations.

2) Not only does a lexicase case frame indicate the possible and required case relations contracted by each verb, it also indicates the case forms with which they may occur. For example, if the Agentive of the verb *open* can occur in the Nominative (NM) case form or with the I case marker *by*, these possibilities are indicated in the case frame:

[+__([+NM,+I],+AGT)].

3) Case frames are in the form of selectional features, and apply not to relational "categories" but to features on heads of sister constituents; that is, case relations and case forms are marked on heads of NP and PP constituents. (See Taylor 1971, especially p. 26; cf. Fillmore 1968:27ff.)

Since prepositions or postpositions realise case forms (CF), they are marked with a single CF feature and, like verbs, with a frame indicating the case forms and relations of the nouns with which they occur. See Secs. 3.1 and 3.2.2 for fuller discussion of prepositions and case forms and for case frames of Vietnamese prepositions. For verb case frames in Vietnamese, see Sec. 3.3.

With case features and semantic features marked on lexical items and the relations between lexical items shown by derivation and subcategorisation rules, the surface structure alone contains enough information to show the grammatical relationships between sentences, and constitutes a (systematic) semantic representation which serves as input to contextual semantic interpretation. Such a framework eliminates the necessity for a distinct deep structure and a transformational component, thus radically simplifying the grammar. Furthermore, if each lexical item is specified only for those features which are inherent in the item and for those which state precisely the immediate syntactic cooccurrence restrictions for that item, and if the rules operate only on those features, the

power of the grammar is significantly reduced from that of a transformational grammar. It has been found unnecessary to resort to transformations to handle the distinctions called "transformational properties" by Fillmore and listed above in Sec. 2.1. Instead, cooccurrence restrictions stated as features in the lexical matrix of a verb can specify what case relations a particular verb can take in its grammatical subject, whether it takes an object case relationship, what complement types and complementisers it allows, and what idiosyncratic case realisations are demanded by a particular verb. General rules are in the form of lexical derivation rules (DR: a rule which serves as a pattern for introducing new members of a class of lexical items based on the members of another class), subcategorisation rules (SR: a rule which subcategorises lexical items, defining the possible classes and subclasses of lexical items), and redundancy rules (RR: a rule which predicts the presence of one feature on the basis of another feature). For examples of SRs and RRs, see Sec. 3.3.4.1.

2.2.3 PROPERTIES OF DERIVATION RULES

A particular type of redundancy rule is the lexical derivation rule (DR), by means of which lexical items are added to the lexicon. A given DR will apply to a class of lexical items identified by certain shared features to produce new members of another class of lexical items. The output items are marked as being derived ([+DERV]); they carry over certain features of the input items and add or delete certain other features.

For example, if it should be found in English that any noun can function as a verb, a lexical DR such as

$$\text{DR.} \quad \begin{bmatrix} +N \\ \alpha F_i \end{bmatrix} \quad \rightarrow \quad \begin{bmatrix} +V \\ +\text{DERV} \\ \alpha F_i \end{bmatrix}$$

can capture that generalisation. Examples of such derived items might be '*put it in a BOX for me*' : '*BOX it for me*', '*he likes to lie in the SUN*' : '*he likes to SUN*', etc. (This over-simplified rule fails to account for the fact that the derived verbs *box* and *sun*, for instance, have quite different grammatical properties.) If a certain class of verbs in English corresponds to a semantically related class of nouns (e.g. *act* : *actor*, *teach* : *teacher*, etc.), then in the grammar there must be a rule to state this fact. If such a class is defined by the feature [+activity], the following DR can be postulated:

$$\text{DR.} \quad \left[\begin{array}{c} +V \\ +\text{activity} \\ \alpha F_i \end{array} \right] \quad \rightarrow \quad \left[\begin{array}{c} +N \\ +\text{DERV} \\ +\text{actor} \\ \alpha F_i \end{array} \right]$$

There must be included in the output of the rule some feature which will allow the derived lexical item to undergo any necessary morphophonemic rule; thus, the feature [+actor] here, in addition to having a semantic function, can be used to condition the morphophonemic rule that adds *-er/-or* to the phonological representation of the nouns derived by this rule (cf. P. L1 1973:279).

Conventions concerning DRs are: Features which appear on both sides of a fletched arrow (\rightarrow) are those which are carried over to the new item; features which are specified on the left-hand side of the arrow but not on the right are those which are absent in the new item; features which appear on the right-hand side but not on the left are those which are added to the new item. All other features not mentioned by the rule are carried over and indicated by the symbols αF_i , βF_j , etc. (See remarks below regarding predictability.) DRs state generalisations about lexical relations and apply to *classes* of lexical items, not to individual lexical items.

P. L1 (1973:234) gives the following characteristics as being typical of derivation:

- (1) An item changes syntactic class.
- (2) A derivational affix can be carried over from one part of speech to another.
- (3) The form, meaning, and semantic properties of derived items are often not completely predictable.
- (4) A derived form may be subject to further derivation or inflection.
- (5) The new class already contains some underived members.

Regarding the predictability of derived items, Starosta (1971b:204) adds, "regularly derived words may undergo secondary shifts in meaning which requires them to be separately listed in the lexicon." This characteristic of derived items raises problems regarding the actual nature of DRs and the synchronic/diachronic productivity of derivation. For one aspect of this productivity, see Sec. 7.4, Conditions for the Derivation of P from V.

For a fuller discussion of derivation relations and rules, see P. L1 1973:234-7, Starosta 1971a:204-5, and Starosta 1971c:176-84.

For a derivation rule used in this study, see Secs. 5.3.3 and 5.4.

CHAPTER III

CASE IN VIETNAMESE

3.0 INTRODUCTION

The case grammar presented here does not pretend to be a full grammar of Vietnamese. It is merely an outline grammar to serve as background for the problems discussed in this study. Many details of Vietnamese grammar and many problems of current theory are omitted as being beyond the scope of this work.

3.1 PHRASE STRUCTURE

The following PS rules are a minimal representation of Vietnamese sentence order and constituency. PS rules in the lexibase model are language-particular representations of surface structure.

$$\begin{aligned}
 S &\rightarrow \left(\begin{array}{c} \text{NP} \\ \text{PP} \\ \text{Adv} \\ \text{S} \end{array} \right)^n \quad V \quad \left(\begin{array}{c} \text{NP} \\ \text{PP} \\ \text{Adv} \\ \text{S} \end{array} \right)^n \quad (\text{FP}) \\
 PP &\rightarrow P \sim \left\{ \begin{array}{c} \text{NP} \\ \text{S} \end{array} \right\} \\
 NP &\rightarrow (\text{Qu}) \text{ N } \left(\begin{array}{c} \text{NP} \\ \text{V} \end{array} \right) ((\text{Rel})\text{S}) (\text{Det})
 \end{aligned}$$

Parentheses indicate optionality of occurrence; braces indicate obligatory choice of one of the elements within the braces. Explanations of terms follow.

S **Sentence:** the basic unit of syntactic analysis; in this study, the maximum domain of grammatical relations which can be defined in terms of syntactic structure.

NP **Noun Phrase:** an endocentric construction of which a noun is the head.

- PP** Prepositional Phrase: an exocentric construction composed of a P and an NP or a P and an S. The case form of the construction is marked by the P; the case relation of the PP as a whole is the one marked on the head noun of the NP. Case relations in P[^]S (if any) are not considered here.
- Adv** Adverb: a lexical category which is the syntactic attribute of a verb, a non-obligatory sister element of the verb.
- V** Verb: the lexical head of a sentence, classified by its attributes (non-obligatory sisters).
- FP** Final Particle: is used here as a cover term, not a grammatical category, for the Negatives không 'not' and chưa 'not yet' which serve as question markers; for the imperative marker; and for final particles such as nhé 'OK?', à 'oh!', and ạ (polite particle). The final particles (distinguished from FP) can cooccur with the question markers and with the imperative marker.
- P** Preposition: the word that occurs in exocentric construction with an NP, forming a PP, and which marks the case form of the PP. By this definition of P, particles which modify the direction or positional relationship of the verb but do not form a construction with an immediately following NP are not Ps. (For example, in nó chạy lên (he, run, upward) 'He ran up', lên is an adverb (Adv), not a P.) As shown here, P is a category of the base, and therefore substantially different from the P of Fillmore and others who derive Ps transformationally. For further discussion of P, see Sec. 3.2.2.0. For discussion of the distinction between Ps and Vs, see Sec. 5.3.3.
- Qu** Quantifier: is a cover term for restrictive modifiers of N, such as Numerals (Nu), Plurals (Pl), and Classifiers (Cl). (Descriptive modifiers follow N.) (Cl occurs obligatorily when a noun takes Nu; its selection is determined by the semantic class of the noun with which it occurs.)
- N** Noun: the lexical head of an NP, which is marked for a case relation and has an external referent.
- Rel** Relative Pronoun
- Det** Determiner

3.2 VIETNAMESE CASE RELATIONS AND CASE FORMS

3.2.0 INTRODUCTION

Following Starosta's 1973 presentation of case relations and case forms in Sora, in the following sections I will present: first, a brief

discussion of each case relation and the case forms in which it can be realised; then, each form with its case markers and the case relations it can realise, with examples; a chart summarising the cooccurrence of case relations and case forms; and, finally, going beyond Starosta's presentation for Sora, a rough classification of Vietnamese verbs based on their case frames.

3.2.1 CASE RELATIONS

3.2.1.0 Introduction

Following Fillmore, Tran and Liem have both given the same case relations for Vietnamese:

Agentive	Locative	
Objective	Directional	
Dative	Source	
Instrumental	Goal	
Benefactive	Extent	(Tran 1971:6-10;
Comitative	Time	Liem 1973a:2-3)

These cases seem to be adequate to handle the problems of coverbs, and I recognise the same case relations with these exceptions: I will consider Locative to be a case relation which can be realised by one of a set of sub-CFs: Location (which is Tran's and Liem's Locative), Source, Goal (their Directional), and Terminus (their Goal). These sub-CFs will be shown (Sec. 3.2.2.4) to behave as a set in realising Locative and Time case relations. Furthermore, "the existence of unique ('surface') case-realization forms (case markers) is not sufficient justification by itself for positing a 'new' case relationship" (Taylor 1971:31; also see pp. 31-2, 34-7). Besides the sub-CF Terminus (cf. Taylor 1971:34,399), I have posited a feature [+path] (cf. Fillmore 1971b:259; Stratton 1971), which is a feature marked on Goal by subcategorisation rules (see Sec. 3.3.4.1). Direction is also a feature implied by the same sub-categorisation rules which, with redundancy rules, give the following tree of locative semantic features:

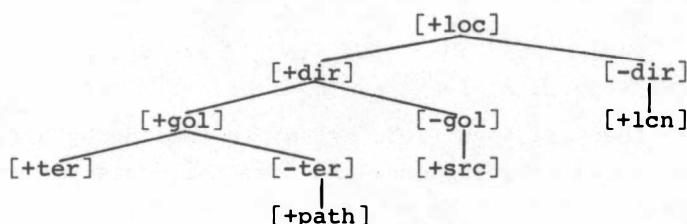


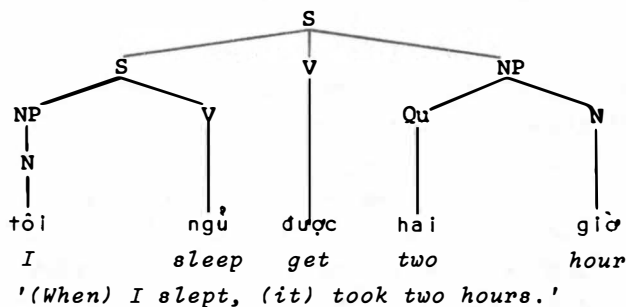
CHART III-1 Locative Feature Tree

Fillmore (1968:25) also suggests that the distinction between these locative cases is not a major one: "There is a certain amount of evidence...that locational and directional elements do not contrast but are superficial differences determined either by the constituent structure or by the character of the associated verb." However, as Fillmore himself indicates (1968:26, fn.34) and as will be seen below (Secs. 3.3.2, 3.3.5.2.1-3, and 3.3.5.4-6), location and direction do contrast sufficiently to subcategorise verbs within larger classes. The subcase analysis adopted here allows for the necessary subcategorisation of verbs while at the same time capturing the complementary relation between location and direction noted by Fillmore.

Tran and Liem give as the realisation of Extent the "preposition" *được*, as in

- (3.1) *tôi ngủ được hai giờ* (Tran 1971:10)
I sleep for two hour
'I slept for two hours.'

However, I consider *được* here to be not a preposition but rather the verb '*get*' and the subject and verb *tôi ngủ* to be a subordinate clause. Such structures are not uncommon for Vietnamese sentences. In fact, Liem (personal communication) now suggests this structure for all such occurrences of *được*. The structure of (3.1) is given here:



Extent in time and space can be shown by the use of sub-CFs Source ... Goal/Terminus, as in (3.2).

- (3.2) *tôi làm việc từ hai giờ đến năm giờ*
I do work from two hour to five hour
'I worked from two o'clock to five o'clock.'

In fact, unless otherwise specified, Extent is implied by a feature of direction on verbs and prepositions, and does not exhibit syntactic behaviour. Therefore, there is no valid reason for positing a case or sub-CF of Extent. It may ultimately prove to be necessary, but so far I have found no evidence for that conclusion.

The case relations given here are posited on purely syntactic evidence in Vietnamese, primarily evidence of the way CRs classify and subclassify predicates.

CR labels are represented in full capital letters, in full form when used in prose, in three-letter abbreviated form when used as features of lexical items, e.g. DATIVE, [+DAT].

Most CFs are customarily labelled by the first letter (in upper case) of the label of the case relation most closely associated with the CF, whether in prose or as features, e.g. D, [+D]. The Nominative CF is represented by NM; Accusative is represented by AC. In prose, sub-CFs are labelled by having the first letter capitalised, e.g. Goal. As features, sub-CFs are labelled by three-letter abbreviations (all lower case), e.g. Goal: [+gol], Location: [+lcn].

3.2.1.1 AGENTIVE

The AGENTIVE case is the instigator of the event described by the verb, and as such is the normal unmarked subject of transitive verbs in accusative languages (cf. Starosta 1973b:4,7). OBJECTIVE occurs obligatorily with AGENTIVE unless marked otherwise in the lexical entry of a verb; INSTRUMENTAL occurs optionally.

AGENTIVE can be realised only in the NM case form in Vietnamese.

3.2.1.2 OBJECTIVE

The OBJECTIVE case is the basic indispensable argument with every verb - "the entity that moves or changes or whose position or existence is in consideration" (Fillmore 1971a:376). It is considered by Fillmore to be the most neutral case. The UCLA English Syntax Project does, in fact, call this the NEUTRAL case and notes that it is "the case associated most closely with the verb itself, and least interpretable independently of the verb" (Stockwell *et al.* 1968:9). As Taylor (1971:19) states, it is "a sort of 'basic' case relationship by virtue of its occurrence with all predicate types." It occurs obligatorily with all AGENTIVE-subject verbs and optionally with all DATIVE-subject verbs. With all other verbs, it occurs as grammatical subject, an aspect of Lexicase grammar which is significantly different from usual Fillmorean practice, which considers OBJECTIVE to be inanimate and - notwithstanding the Fillmore definition cited above - does not assign the OBJECTIVE case to subjects of intransitive verbs of action.

OBJECTIVE is realised most frequently in the AC or NM case forms, but can also occur in the L case form.

INSTRUMENTAL may be realised in the I, AC, and NM case forms, and, when preposed to the grammatical subject, may occur as C.

3.2.1.6 COMITATIVE

The COMITATIVE case relation expresses parallel association between two NPs, usually in the activity described by the verb. It can occur with all [+voluntary] verb types.

COMITATIVE is realised only in the C case form.

3.2.1.7 BENEFACTIVE

The BENEFACTIVE case identifies the noun designating the entity on behalf of which or in place of which the action of the verb is performed. It can occur with all [+voluntary] verb types.

BENEFACTIVE may be realised in the B case form, but occurs more frequently in the D case form.

3.2.1.8 TIME

The TIME case relation identifies the orientation in time of the state or event described by the verb. It can occur with all verb types.

TIME does not have a case form particularly associated with it. It is realised in the L and AC case forms, in both of which it is frequently preposed to the grammatical subject. Every TIME phrase must contain a noun lexically marked [+time].

3.2.2 CASE FORMS

3.2.2.0 Characteristics of Case Forms

As defined in Sec. 2.1 for this study, a case form (CF) is a feature which characterises a syntactically significant set of one or more case markers, which are overt realisations of case relations (CR). Case markers in Vietnamese are word order and prepositions. A CF is a feature of nouns and prepositions: An NP gets its CF and CR from the head N, and a PP gets its CF from the P and its CR from the head N of the NP.

Every P is marked in its lexical entry with a single case form and with a case frame indicating the case forms and case relations it can take in the head N of the NP which occurs with that P. It is assumed here that, for Vietnamese, the case relation of that N always occurs in the Accusative case form. That is, [+NM] and [+AC] are the only case forms possible for nouns in Vietnamese and the rule

$$\text{RR. } \left\{ \begin{array}{l} [+P] \\ [+V] \end{array} \right\} \rightarrow [- __ [+NM]]$$

accounts for the fact that, in Vietnamese, no noun following the verb or a preposition can be in the Nominative case form. Therefore, it is unnecessary to mark the case form for case relations in individual P case frames. One class of Ps, like some Vs, can occur in construction with an embedded sentence containing a non-finite verb. This type of occurrence is not discussed in this study.

In the sections below, for those case forms which have P case markers, the case frame of the P is given, as well as an approximate English gloss. The D case marker and most of the L case markers are coverbs, and these are discussed in detail in succeeding chapters. In this chapter, for the sake of simplicity, they are treated as ordinary prepositions.

3.2.2.1 The Nominative Case Form: [+NM]

The Nominative case form marks the grammatical subject of the sentence. Nominative occurs immediately preceding the verb and never takes a preposition. The Nominative case form realises AGENTIVE, INSTRUMENTAL, DATIVE, and OBJECTIVE case relations. In Vietnamese, DATIVE and OBJECTIVE can be subject only of DATIVE-subject and OBJECTIVE-subject verbs, respectively (see Clark 1971a regarding "passive" in Vietnamese). Therefore, there is a subject choice hierarchy only between AGENTIVE and INSTRUMENTAL; that is, with AGENTIVE-subject verbs, if AGENTIVE is present in a sentence, it will be subject; if it is not present and INSTRUMENTAL is present, INSTRUMENTAL will be subject. Examples of these CRs in the NM case form are given here.

[+NM,+AGT]

- (3.5) tôi cắt thịt bằng dao này
 I cut meat by knife this
 [+NM] [+AC] [+I] [+AC]
 [+AGT] [+OBJ] [+INS]

'I cut the meat with this knife.'

[+NM,+INS]

- (3.6) dao này cắt thịt
 knife this cut meat
 [+NM] [+AC]
 [+INS] [+OBJ]

'This knife cuts meat.'

[+NM,+DAT]

(3.7) tôi biết cô-ấy

I know she

[+NM]
[+DAT][+AC]
[+OBJ]

'I know her.'

[+NM,+OBJ]

(3.8) nó chạy mau
3p run fast
(inferior)[+NM]
[+OBJ]

'He ran fast.'

3.2.2.2 The Accusative Case Form: [+AC]

The Accusative case form occurs postverbally and without a P. Since all non-NM nouns are AC, AC can realise all case relations except AGENTIVE. When an AC NP is not part of a PP, it can realise all CR except COMITATIVE, so that there is a rule [+V] → [-__[+AC,+COM]]. DATIVE, BENEFACTIVE, and INSTRUMENTAL occur without a preceding P only when they immediately follow the verb. Examples of these cases realised as AC are given below.

[+AC,+OBJ]

The AC case form is most closely associated with OBJECTIVE, which is not usually preceded by a P. OBJECTIVE either follows the verb immediately, as in (3.9) and (3.10),

(3.9) nó làm việc này
3p do work this[+NM]
[+AGT][+AC]
[+OBJ]

'He does this work.'

(3.10) tôi hiểu nó
I understand 3p[+NM]
[+DAT][+AC]
[+OBJ]

'I understand him.'

or follows another NP or PP which follows the verb:

- (3.11) tôi cho nó hai cuốn sách
 I give 3p two Cl book
 [+NM] [+AC] [+AC]
 [+AGT] [+DAT] [+OBJ]

'I gave him two books.'

OBJECTIVE can also be topicalised:

- (3.12) nhà này tôi bán
 house this I sell
 [+AC] [+NM]
 [+OBJ] [+AGT]

'This house I'm selling.'

[+AC,+DAT]

The DATIVE can occur as [+AC] without a P when it immediately follows the verb, as in (3.13), not when the OBJECTIVE comes between it and the verb.

- (3.13) nó gửi tôi một bức thư
 3p send I one Cl letter
 [+NM] [+AC] [+AC]
 [+AGT] [+DAT] [+OBJ]

'He sent me a letter.'

It obligatorily occurs without a P with the verb *cho* 'give', which it immediately follows, as in (3.11) above and (3.14).

- (3.14) tao cho mày mấy cái tát bây giờ (Truong &
 I give you several Cl slap now Nguyen
 (familiar) (fam) 1963:267)
 [+NM] [+AC] [+AC] [+AC]
 [+AGT] [+DAT] [+OBJ] [+TIM]

'I'm going to give you some slaps right now.'

[+AC,+BEN]

- (3.15) mua tôi cái áo (Le 1960:261)
 buy I Cl dress
 [+AC] [+AC]
 [+BEN] [+OBJ]

'Buy me a dress.'

[+AC,+LOC]

LOCATIVE can occur as [+AC] without a P, immediately following a class of OBJECTIVE-LOCATIVE verbs (OBJECTIVE-subject verbs which have LOCATIVE in their lexical entries).

- (3.16) nó đi Sài Gòn rồi
 he go already
 [+NM] [+AC]
 [+OBJ] [+LOC]

'He went to Saigon already.'

AGENTIVE-subject verbs with inherent locatives can take their LOCATIVES without Ps when the LOCATIVE noun is a relator noun. (See Sec. 3.2.3 for locative relator nouns and Sec. 3.3.5.2 for AGENTIVE-LOCATIVE verbs.) (3.17) has a locative relator noun.

- (3.17) nó để cái bút trên bàn
 he put CL pen top table
 [+NM] [+AC] [+AC]
 [+AGT] [+OBJ] [+LOC]
 [+relation]

'He put the pen on the table.'

[+AC,+TIM]

TIME is distinguished from LOCATIVE by the fact that every TIME phrase must contain a noun lexically marked [+time]. [+AC,+TIM] can occur with every verb type.

- (3.18) tôi mua gạo hôm qua
 I buy rice day past
 [+NM] [+AC] [+AC]
 [+AGT] [+OBJ] [+TIM]
 [+time]

'I bought rice yesterday.'

- (3.19) ngày thứ-hai tôi mua gạo
 day second I buy rice
 [+AC] [+NM] [+AC]
 [+TIM] [+AGT] [+OBJ]
 [+time]

'I'll buy rice on Monday.'

[+AC,+INS]

INSTRUMENTAL occurs as [+AC] with only a small class of OBJECTIVE-subject verbs.

- (3.20) nó sẽ đi xe đồ
 he Fut go vehicle ferry
 [+NM] [+AC]
 [+OBJ] [+INS]

'He'll go by bus.'

3.2.2.3 The [+D] Case Form

Case marker: cho 'to, for'

$$\begin{bmatrix} +P \\ +D \\ +_ \end{bmatrix} \begin{bmatrix} \{+DAT, +BEN\} \end{bmatrix}$$

The D case form realises DATIVE and BENFACTIVE. The case marker cho is discussed in detail in Sec. 5.4.

[+D, +DAT]

DATIVE as [+D] occurs with AGENTIVE-subject verbs which have Goal DATIVE in their lexical entries (AGENTIVE-DATIVE-Goal verbs). It either precedes or follows the OBJECTIVE. When DATIVE immediately follows the verb, the case marker is optional.

- (3.21) nó gởi (cho) tôi một bức thư
 he send to I one Cl letter
 $\begin{bmatrix} +NM \\ +AGT \end{bmatrix}$ $\begin{bmatrix} +D \end{bmatrix}$ $\begin{bmatrix} +AC \\ +DAT \end{bmatrix}$ $\begin{bmatrix} +AC \\ +OBJ \end{bmatrix}$

'He sent (to) me a letter.'

With AGENTIVE-DATIVE verbs, the sentences with the D case marker are ambiguous since the noun could also be [+BEN].

- (3.22) nó gởi thư cho tôi
 he send letter to I
 $\begin{bmatrix} +NM \\ +AGT \end{bmatrix}$ $\begin{bmatrix} +AC \\ +OBJ \end{bmatrix}$ $\begin{bmatrix} +D \end{bmatrix}$ $\begin{bmatrix} +AC \\ +DAT \end{bmatrix}$
 'He sent letters to me.'
 (or 'He sent letters (to somebody else) for me.')

[+D, +BEN]

As stated above, when [+D, +BEN] occurs with AGENTIVE-DATIVE-GOAL verbs, the sentence is ambiguous since the noun, e.g. tôi in (3.23), could also be DATIVE.

- (3.23) nó bán trái đó cho tôi
 he sell fruit that for I
 $\begin{bmatrix} +NM \\ +AGT \end{bmatrix}$ $\begin{bmatrix} +AC \\ +OBJ \end{bmatrix}$ $\begin{bmatrix} +D \end{bmatrix}$ $\begin{bmatrix} +AC \\ +BEN \end{bmatrix}$
 'He sold that fruit for me.'
 (or 'He sold that fruit to me.')

The ambiguity is removed if a DATIVE cooccurs with the BENEFACTIVE, as in (3.24).

- (3.24) nó bán cô-ấy trái đó cho tôi
 he sell she fruit that for I
 [+NM] [+AC] [+AC] [+D] [+AC]
 [+AGT] [+DAT] [+OBJ] [+BEN]
 'He sold her that fruit for me.'

Since mua, chạy, and hiểu cannot take Goal DATIVE, (3.25), (3.26), and (3.27) are unambiguously BENEFACTIVE.

- (3.25) nó mua trái đó cho tôi
 he buy fruit that for I
 [+NM] [+AC] [+D] [+AC]
 [+AGT] [+OBJ] [+BEN]
 'He bought that fruit for me.'

- (3.26) nó chạy mau cho tôi
 he run fast for I
 [+NM] [+D] [+AC]
 [+OBJ] [+BEN]
 'He ran fast for me.'

- (3.27) anh hiểu cho tôi nhé
 elder understand for I O.K.?
 bro.
 [+NM] [+D] [+AC]
 [+DAT] [+BEN]
 'Please try to understand for me.'

3.2.2.4 The [+L] Case Form

The L sub-CFs are a group of syntactically distinguished prepositions. They realise LOCATIVE, TIME, and, for two sub-CFs, DATIVE and OBJECTIVE. Of the four sub-CF Ls so far posited, the Location sub-CF is [-direction]. The [+direction] sub-CFs are Source, Goal, and Terminus. (See Sec. 3.3.4.1 for SRs and RRs for subclasses of [+locative].) The sub-CFs are given here with examples.

3.2.2.4.1 The Location Sub-CF: [+lcn]

Case markers: ở / tại 'in, at'

[+P
 +L
 -dir
 +_ [+LOC]]

The Location sub-CF marks the place in space in which the event of the verb occurs and, as such, occurs with all verb types. The Location

sub-CF does not occur with the CR TIME in Vietnamese. Location in time can be indicated by the use of the relator noun *trong* 'inside' (see Sec. 3.2.3).

[+L,+lcn,+LOC]

- (3.28) ông-ấy dạy toán tại trường đó
 he teach math in school that
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+lcn] [+LOC]

'He teaches mathematics in that school.'

- (3.29) nó đứng ở đường Lê-Lợi
 he stand in street
 [+NM] [+L] [+AC]
 [+OBJ] [+lcn] [+LOC]

'He's standing in Le-Loi Street.'

- (3.30) ở sở chúng tôi làm việc nhiều
 in office Pl I do work much
 [+L] [+AC] [+NM] [+AC]
 [+lcn] [+LOC] [+AGT] [+OBJ]

'We work hard in the office.'

- (3.31) ở làng đó tôi thường nghe chuông
 in village that I usual hear bell
 [+L] [+AC] [+NM] [+AC]
 [+lcn] [+LOC] [+DAT] [+OBJ]

'In that village, I usually hear bells.'

The case marker ở and a LOCATIVE noun can occur preceding a verb of direction, as in (3.32), where Liem (1973a:11) gives three possible analyses, as shown. (I have interpreted Liem's analysis in terms of the formalisation used in this study.)

- (3.32) ông-ấy ở Mỹ qua
 he stay America come over
 (1) [+NM] [+L] [+V]
 [+OBJ] [+src]
 (2) [+L] [+V]
 [+lcn]
 (3) [+V] [+AC] [+V]
 [+LOC] [+lcn]

'He came over from America.'

If $\dot{\sigma}$ in (3.32) is a verb, as in solution (3), then one would expect a different translation since the analysis of verbs in series suggests sequential action. If $\dot{\sigma}$ is in fact a P, as in solutions (1) and (2), then it shares with the [-gol] Source P the ability to occur before a [+gol] OBJECTIVE-subject verb (see the following section on the Source sub-CF), which is the only instance in Vietnamese of PP occurring after NM and before V. Since [+src] implies [+dir], the [-dir] Location P cannot be a [+src] case marker, as in solution (1). Further, Liem now feels (personal communication) that $\dot{\sigma}$ is always [+lcn], never [+src]. Therefore, his solution (2) for (3.32) is the correct one.

3.2.2.4.2 The Source Sub-CF: [+src]

Case markers: từ 'from'

+P +L -gol +extent +_ [+locus] +_ [{+LOC, +TIM}]

khỏi 'out of'

+P +L -gol -extent +_ [+interior] +_ [+LOC]
--

The [+extent] Source sub-CF marks the locus in space or time from which the action of the verb is directed. The P từ frequently occurs preceding Goal or Terminus, expressing specific Extent in space or time. The [-extent] Source P khỏi cannot occur expressing Extent and cannot occur with TIME. It is very specific in its use: It marks the interior space out of which the action of the verb is directed. The [-gol] Ps are marked [+src] by a redundancy rule (see Sec. 3.3.4.1 below).

[+L, +src, +ext, +LOC]

When realising LOCATIVE, the Source P từ occurs with verbs of direction, as in (3.33) and (3.34), and with certain motion verbs, as in (3.35), where it precedes the [+gol] P.

- (3.33) tôi gửi nó một bưu-ảnh từ Bangkok
 I send he one postcard from

+NM	+AC	+AC	+L	+AC
+AGT	+DAT	+OBJ	+src	+LOC
			+ext	

'I sent him a postcard from Bangkok.'

- (3.34) từ Bangkok, tôi đi Chiêng-Mai
 from I go

+L	+AC	+NM	+AC
+src	+LOC	+OBJ	+LOC
+ext			

'From Bangkok I went to Chieng-Mai.'

- (3.35) nó lái xe từ Sài Gòn lên Đà Lạt
 he drive vehicle from up to
 [+NM] [+AC] [+L] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+src] [+LOC] [+gol] [+LOC]

'He drove the car from Saigon to Dalat.'

As shown in (3.34), (3.36), and (3.37), the Source P từ precedes OBJECTIVE-subject Goal verbs.

- (3.36) tôi từ Bangkok đi Chiêng-Mai
 I from go
 [+NM] [+L] [+AC] [+V] [+AC]
 [+OBJ] [+src] [+LOC] [+goal] [+LOC]

'I went to Chieng-Mai from Bangkok.'

- (3.37) nó từ Sài Gòn lên
 he from go up
 [+NM] [+L] [+AC] [+V]
 [+OBJ] [+src] [+LOC] [+goal]

'He came up (here) from Saigon.'

[+L,+src,-ext,+LOC]

As may be expected from the specificity of its interpretation, the P khỏi is more limited in its use than the P từ. It most frequently occurs with Source verbs, as in (3.38), and with the adverb ra 'out'. It can also occur with Goal verbs such as ra 'go out' and đi 'go', as in (3.39).

- (3.38) chị-ấy nhổ cây (ra) khỏi chậu
 she pull out plant out out of pot
 [+NM] [+AC] [+Adv] [+L] [+AC]
 [+AGT] [+OBJ] [+src] [-ext] [+LOC]

'She pulled the plant out of the pot.'

- (3.39) đi khỏi Nha-Trang chừng ba cây số
 go out of approx. three kilometer
 [+L] [+AC] [+AC]
 [+src] [+LOC] [+?]
 [-ext]

'Go about three kilometers beyond Nha-Trang.'

(Nguyen D-H 1966:223)

[+L,+src,+ext,+TIM]

When realising TIME, [+src] can occur with all verbs which allow extent of time.

- (3.40) tôi sẽ làm việc từ 8 giờ sáng
 I Fut do work from hour morning
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+src] [+TIM]
 [+ext]

'I'll work from 8 a.m.'

- (3.41) từ ngày đó tôi hiểu nó
 from day that I understand he
 [+L] [+AC] [+NM] [+AC]
 [+src] [+TIM] [+DAT] [+OBJ]
 [+ext]

'Since that day, I understand him.'

As with Source LOCATIVES and Goal verbs, Source TIME phrases precede Goal TIME phrases.

- (3.42) nó ngủ từ 3 giờ đến 5 giờ
 he sleep from hour until hour
 [+NM] [+L] [+AC] [+L] [+AC]
 [+OBJ] [+src] [+TIM] [+ter] [+TIM]
 [+ext]

'He slept from 3 o'clock to 5 o'clock.'

3.2.2.4.3 The Goal Sub-CF: [+gol]

Case markers: qua/sang 'across (to); lại 'back to'

<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">+P</div> <div style="display: inline-block; vertical-align: middle;">+L</div> <div style="display: inline-block; vertical-align: middle;">+gol</div> </div> <div style="display: inline-block; vertical-align: middle; font-size: 2em;">}</div> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">+LOC</div> <div style="display: inline-block; vertical-align: middle;">+TIM</div> <div style="display: inline-block; vertical-align: middle;">+DAT</div> <div style="display: inline-block; vertical-align: middle;">+OBJ</div> </div> </div>	về	'(back) to'
	ra	'out (to)'
	vô/vào	'into, onto'
	lên	'up (to)'
	xuống	'down (to)'

The Goal sub-CF marks the path or goal toward which the action of the verb is directed; that is, the noun associated with a Goal sub-CF names the path or intended terminal point of the action of the verb, never the point of origin. Through subcategorisation and redundancy rules, these Ps can mark either [+terminus] or [+path] on their LOCATIVE nouns. (Ref. Chart III-1 in Sec. 3.2.1.0 above and Sec. 3.3.4.1 below.)

[+L,+gol,+LOC]

The Goal sub-CF realises LOCATIVE for AGENTIVE- and OBJECTIVE-subject verbs which have obligatory or optional LOCATIVES in their lexical entries.

- (3.43) nó viết một câu vào tờ giấy đó
he write one line onto Cl paper that
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]

'He wrote a line on that paper.'

- (3.44) nó gửi thư qua tôi
he send letter across I
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]

'He sent a letter to/through me.'

Qua in (3.44) can be interpreted as [+ter] or [+path].

- (3.45) nó đi lên Đà Lạt
he go up to
 [+NM] [+L] [+AC]
 [+OBJ] [+gol] [+LOC]

'He went up to Dalat.'

[+L,+gol,+TIM]

TIME can occur as [+gol] with most verb types.

- (3.46) tôi {sẽ Fut} mua gạo vào ngày thứ-hai
I buy rice into day second
 [+NM] {đã Past} [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+TIM]

'{I'll buy / I bought} rice on Monday.'

(See Sec. 3.3.5.2 regarding discussion of vào's [+entering] feature allowing [+surface] or [+enclosed]. Vào could be glossed in (3.46) as 'within'.)

- (3.47) qua đầu năm tôi trở-về nhà
across head year I return house
 [+L] [+AC] [+NM] [+AC]
 [+gol] [+TIM] [+OBJ] [+LOC]

'After the beginning of the year, I'll return home.'

[+L,+gol,+DAT]

The Goal Ps can occur with the DATIVE of some verbs.

- (3.48) nó gửi hai bức thư về tôi (Liem 1969:101)
he send two letter to I
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+DAT]

'He sent two letters to me.'

[+L,+gol,+OBJ]

Some of the Goal case markers can occur with what is analysed provisionally as the OBJECTIVE of a class of [+information] verbs.

- (3.49) tôi hiểu về việc đó
I understand to matter that
 [+NM] [+L] [+AC]
 [+DAT] [+gol] [+OBJ]

'I understand about that.'

(See Liem 1969:98-9 regarding this use of [+L] case markers.)

3.2.2.4.4 The Terminus Sub-CF: [+ter]

Case markers: đến tới 'to, until, at'

[+P
 +L
 +ter
 +__ [+LOC,+TIM,+DAT,+OBJ]]

The terminus sub-CF marks the terminal point of the action of the verb, the achieved end. It has many of the same characteristics as the Goal sub-CF, although the Terminus sub-CF cannot mark [+path] on its LOCATIVE nouns.

[+L,+ter,+LOC]

The Terminus sub-CF realises LOCATIVE for AGENTIVE- and OBJECTIVE-subject verbs which have obligatory or optional LOCATIVE in their lexical entries.

- (3.50) họ dọn nhà đến khu đại-học
they arrange house to area university
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+ter] [+LOC]

'They moved to the university compound.'

- (3.51) nó chạy đến trường
he run to school
 [+NM] [+L] [+AC]
 [+OBJ] [+ter] [+LOC]

'He ran to the school.'

Terminus is frequently preceded by Source to indicate the boundaries of extent in time or space.

- (3.52) nó chạy từ đường Lê-Lợi qua cầu này đến
he run from street across bridge this to
 [+NM] [+L] [+AC] [+L] [+AC] [+L]
 [+OBJ] [+src] [+LOC] [+gol] [+LOC] [+ter]

chợ đó
market that
[+AC]
[+LOC]

'He ran from Le-Loi Street across the bridge to the market.'

[+L,+ter,+TIM]

TIME can occur as [+ter] with all major verb types.

(3.53) đến khi đó nó sẽ hiểu rồi
at time that he Fut understand already
[+L] [+AC] [+NM]
[+ter] [+TIM] [+DAT]

'By that time, he'll understand already.'

The [+ter] sub-CF marks extent in time, preceded or not by [+L,+src].

(3.54) tôi đã làm việc đến cuối tháng
I Past do work until end month
[+NM] [+AC] [+L] [+AC]
[+AGT] [+OBJ] [+ter] [+TIM]

'I worked until the end of the month.'

(3.55) nó ngồi yên từ 2 giờ đến 3 giờ
he sit quiet from hour until hour
[+NM] [+L] [+AC] [+L] [+AC]
[+OBJ] [+src] [+TIM] [+ter] [+TIM]

'He sat quietly from 2 o'clock to 3 o'clock.'

[+L,+ter,+DAT]

The Terminus Ps can occur with the DATIVE of some verbs.

(3.56) con chuyển-đạt đến cô-ấy những lời thăm
child convey to miss Pl word visit
[+NM] [+L] [+AC] [+AC]
[+AGT] [+ter] [+DAT] [+OBJ]
của ba
property father
[+AC]
[+OBJ]

'Give her my regards, my child.'

[+L,+ter,+OBJ]

Like some of the Goal case markers, the Terminus P can occur with what is provisionally analysed as the OBJECTIVE of a class of [+information] verbs.

(3.57) tôi nhớ đến cô-ấy nhiều

I recall to she much

[+NM] [+L] [+AC]
[+DAT] [+ter] [+OBJ]

'I think about her a lot.'

Liem (1969:98-9) states that these direction markers are used to "mark the great distance or social difference between the speaker and the person spoken to, thus expressing the speaker's respect and humility."

3.2.2.5 The [+I] Case Form

Case marker: bằng 'by'

[+P
+I
+__ [+INS]]

The I case form realises only INSTRUMENTAL.

[+I, +INS]

(3.58) tôi cắt thịt bằng dao này

I cut meat by knife this

[+NM] [+AC] [+I] [+AC]
[+AGT] [+OBJ] [+INS]

'I'll cut the meat with this knife.'

(3.59) nó đi Mỹ-Tho bằng xe đò

he go by bus

[+NM] [+AC] [+I] [+AC]
[+OBJ] [+LOC] [+INS]

'He went to My-Tho by bus.'

In some instances, INSTRUMENTAL as [+I] can be preposed.

(3.60) bằng máy-bay chúng ta có-thể đi lẹ được
by airplane Pl we able go fast possible

[+I] [+AC] [+NM]
[+INS] [+OBJ]

'We were able to travel fast by air.' (Liem 1969:158)

3.2.2.6 The [+C] Case Form

Case marker: với 'with'

[+P
+C
+__ [{+COM, +INS}]]

The C case form realises COMITATIVE and INSTRUMENTAL. There are many problems with the C case form in Vietnamese, problems involving N-N

relationships, reciprocal nouns, and [+C,+COM] predicates. These problems will not be handled in this study.

[+C,+COM]

- (3.61) tôi làm việc với ông-ấy
 I do work with he
 [+NM] [+AC] [+C] [+AC]
 [+AGT] [+OBJ] [+COM]

'I work with him.'

- (3.62) em nó đi với nó
 young sib he go with he
 [+NM] [+C] [+AC]
 [+OBJ] [+COM]

'His brother went with him.'

- (3.63) ai cũng nói-chuyện với nó
 who also converse with he
 [+NM] [+C] [+AC]
 [+OBJ] [+COM]

'Everyone talks with him.'

The COMITATIVE can be preposed, as in (3.64).

- (3.64) với nó, ai cũng thích nói-chuyện (Liem 1969:158)
 with he who also like converse

'With him, everyone likes to talk.'

[+C,+INS]

The C case form can realise INSTRUMENTAL when INSTRUMENTAL is topicalised.

- (3.65) với tiền ấy tôi đã mua hai đĩa hát
 with money that I Past buy two disk sing
 [+C] [+AC] [+NM] [+AC]
 [+INS] [+AGT] [+OBJ]

'With that money, I bought two records.'

3.2.2.7 The [+B] Case Form

Case markers: giúp / hộ 'for, on behalf of'

[+P
 +B
 + [BEN]]

The B case form realises only the BENEFACTIVE case relation. All the [+D,+BEN] sentences in Sec. 3.2.2.3 above may, instead, be [+B,+BEN], in

which case they are all unambiguously BENEFACTIVE.

[+B, +BEN]

- (3.66) nó bán trái đó giùm tôi
 he sell fruit that for I
 [+NM] [+AC] [+B] [+AC]
 [+AGT] [+OBJ] [+BEN]

'He sold that fruit for me.'

- (3.67) em chạy mau giùm tôi
 young sib run fast for I
 [+NM] [+B] [+AC]
 [+OBJ] [+BEN]

'Please run fast for me.'

- (3.68) nó đưa trái cho cô-ấy giùm tôi
 he hand fruit to she for I
 [+NM] [+AC] [+D] [+AC] [+B] [+AC]
 [+AGT] [+OBJ] [+DAT] [+BEN]

'He handed the fruit to her for me.'

- (3.69) anh viết hộ tôi đi (Nguyen D-H 1966:194)
 elder write for I go
 bro. (Imper)
 [+NM] [+B] [+AC]
 [+AGT] [+BEN]

'Please write it for me.'

3.2.3 LOCATIVE RELATOR NOUNS

There is a set of locative-type words which, for the moment, I will call *trong*-class words. They occur in LOCATIVE or TIME phrases, following verbs or prepositions and preceding nouns, as in the example sentences given below. The set includes the following words, with approximate meanings:

trong	inside
ngoài	outside
trên	above, top
dưới	beneath, bottom
trước	before, front
sau	after, behind
giữa	between, the middle
quanh	surrounding
ngang	across

quãng, khoảng	space, interval
tận	all the way, extreme point
đăng	side, direction
bên	side

- (3.70) Út bỏ kẹo (ở) trong hộp
 put candy in inside box

'Út put the candy away in the box.'

- (3.71) Lan ngồi trên xe đi Nha-Trang
 sit top vehicle go

'Lan was (sitting) on the Nha-Trang bus.'

- (3.72) nó thọc tay (vào) dưới giường tìm hộp nữ-trang
 3p thrust hand into under bed seek box jewellery

'He stuck his arm under the bed looking for the box of jewellery.'

- (3.73) Huế bị (họ) pháo-kích bên tỉnh-đường
 suffer they shell side province headquarters

'Hue suffered shelling (they shelled) at the Province headquarters.'

- (3.74) Lan đi trong tháng năm
 go inside month five

'Orchid is going in May.'

Thompson (1965a:200-2) includes all of these words but quãng, tận, đăng, and bên in a list of what he calls "relator nouns", nouns which "express position (in space or time) or some vaguer dimension in relation to something else" (p. 200), which "clarify relative position" (p. 316), and which he considers to be head nouns in a phrase (p. 318).

Cadiere (1958:121) includes some trong-class words in a list of words he calls prepositions. He also includes the noun nơi 'place, location'. He gives an example with nơi from Vĩnh, a North Central dialect, (3.75), which is not an acceptable use of nơi for those Southern speakers questioned.

- (3.75) ...ở nơi nhà trường (Cadiere 1958:122)
 be in place house school
 'live at school'

Liem (1969:154-5) analyses trong-class words as Location Prepositions, which are the initial nucleus of a Location-Direction Relator Axis Phrase. He calls what I have called prepositions in Sec. 3.2.2.4 above (i.e. vô in (3.76)) Defective Verbs and includes them in the Predicate

instead of in the locative phrase, as in (3.76) (vertical lines indicate phrase boundaries).

- (3.76) nó / đi vào / trong nhà (Liem 1969:154)
 he go enter in house
 Sbj IntrV Defect.V LPrep Rel.Axis Hd
 'He went into the house.'

In his 1973 paper, Liem refers to the *trong*-class words as a special class of nouns which occur in the [+NM,+LOC] slot, but gives no examples.

Ha (1970:30-1) keeps the constraint of a single P for each PP by considering *trong*-class words to have the "basically nominal" nature described by Thompson and considering them to be nouns modified by other nouns (the following noun) when they occur after a Direction preposition. However, when they occur immediately after a directional verb, she proposes that they undergo a "co-prep" derivation rule and become L-prepositions. She gives the examples (3.77) and (3.78).

- (3.77) tôi đi vào trong nhà (Ha 1970:31)
 I go enter inside house
 [+V] [+P] [+N] [+N]
 [+dir] [+dir]
 'I went into/inside the house.'

- (3.78) tôi vào trong nhà (Ha 1970:31)
 I enter inside house
 [+V] [+P] [+N]
 [+dir] [+loc]
 'I went inside the house.'

However, it seems wrong and unnecessary to say that *trong* in (3.77) is different grammatically from *trong* in (3.78). Further, *vào* in (3.77) is a P, according to Ha and according to my definition of P in Sec. 3.1 above. (Also, see Sec. 3.2.2.4.3 for more "*vào*-class" words as [+L,+gol] Ps.) If the *trong*-class words are also analysed as Ps, the cooccurrence of a *vào*-class word and *trong*-class word (as in (3.77)) would violate a proposed universal constraint against P[^]P in a grammar. As defined in Sec. 3.1 in this study, P is one of the obligatory elements of a PP and marks the case form of the PP. A PP cannot have more than one case form. In marking the case form of the PP, the P functions in satisfying the requirements of verbs, whose case frames specify case form and case relation cooccurrences. The definition of P as a case marker disallows P[^]P.

It would be possible instead to consider the *vào*-class words to be

- (3.71) Lan ngồi trên xe đi Nha-Trang
 sit top vehicle go
 [+N] [+N] [+N]
 [+place] [+place]
 [+rel]

'Lan was (sitting) on the Nha-Trang bus.'

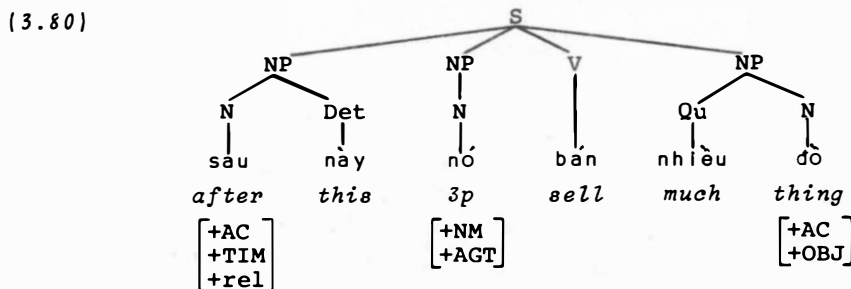
both trên and Nha-Trang are [+place] nouns but trên must be followed by another noun or a determiner.

The Nr bên is not as clearly a relator noun as the others. Thompson states (1965:200) that relator nouns never occur as heads of numerative phrases; bên does, as in cả hai bên ('all, two, side') 'both sides', but bên also functions as Nr, as in (3.73), repeated here, where an Nr is needed, in the absence of a [+L] P (such as ở 'in'), to fulfill the requirements on tỉnh-đường as the inalienable LOCATIVE of Huế.

- (3.73) Huế bị pháo-kích bên tỉnh-đường
 suffer shell side prov. hqtrs
 [+NM] [+AC]
 [+OBJ] [+LOC]
 [+rel]

'Hue suffered shelling at the Province Headquarters.'

Another argument in support of trong-class words being nouns instead of prepositions is their ability to take determiners which cannot themselves act as full NPs elsewhere, as này in (3.80) and kia in (3.81) (overleaf).

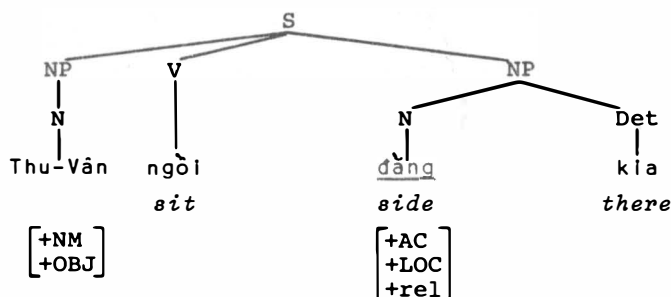


'Lately he has sold many things.'

Starosta (1971b:195-200) discusses relator nouns in Sora, an Austro-asiatic language of the Munda family of India. He calls them Noun Auxiliaries in that work and states that they are bound nouns used to mark case, that they "act as heads of Noun Phrases when this is necessary to satisfy the selectional requirements of a verb" (p. 195). He discusses the DATIVE noun auxiliary in detail, showing the selectional restrictions of animate and inanimate with DATIVE and OBJECT. In his

1973 paper on Sora (1973b), he gives three noun auxiliaries for LOCATIVE and four for TIME.

(3.81)



'Thu-Van is sitting over there.'

In Vietnamese, too, Nrs, as well as fulfilling a function of specifying spatial orientation, are necessary in some instances to satisfy the selectional requirements of a verb. This is shown in Secs. 3.3.5.2 (AGENTIVE-LOCATIVE verbs) and 3.3.5.4 (OBJECTIVE-LOCATIVE-Goal verbs). The classification as a noun of *trong* in (3.77) and (3.78) above, both from Ha 1970:31 and reanalysed here,

- (3.77) *tôi đi vào trong nhà*
 I go into inside house
 [+NM] [+L] [+AC]
 [+OBJ] [+gol] [+LOC]

'I went into the house.'

- (3.78) *tôi vào trong nhà*
 I enter inside house
 [+NM] [+AC]
 [+OBJ] [+LOC]

'I went inside the house.'

is consistent with the requirements of verb case frames. That is, the verb *đi* can take [+L,+LOC], whereas the verb *vào*, in (3.78), must take [+AC,+LOC], a requirement which would not be met if *trong* were a P.

Finally, an Nr occupies the position of the head noun in an NP, i.e. the first noun. This argument carries more weight when one looks at Chinese, which has prepositions but whose head noun is final in the NP, so that there is no chance of confusion between head nouns and Ps. Chinese has a set of Nrs (called "localisers" by Chao (1968), Chu (1972), and Tang (1972), and "place words" by DeFrancis (1963)), and they occur in phrase-final head-noun position. Furthermore, Chu (1972:86-92,103),

in a discussion of locative marking on locative phrases, gives evidence that in what he suggests is Late Archaic Chinese there was a genitive marker between the Nr and its modifying noun - the same construction as the genitive construction in Modern Mandarin: Possessor - Genitive Marker - Possessed (Head Noun). Later, the genitive marker dropped out of usage with Nrs (as with other inalienably possessed heads), and Modern Mandarin has Noun - Nr, with the Nr occupying the position of head noun.

Most locative Nrs in Vietnamese, like the locative coverbs discussed in Chapter V (see Sec. 5.1.3), can occur as adverbs following verbs of location or direction, but this aspect of Nrs will not be investigated in this work. For example, see Jones & Thong 1960:139-42.

3.2.4 SUMMARY OF CR AND CF COOCCURRENCES

CF:	CR: Case Markers:	AGT	OBJ	DAT	LOC	INS	COM	BEN	TIM
NM	Position	X	X	X		X			
AC	Position		X	X	X	X		X	X
D	P: cho			X				X	
L lcn	P: ở/tại				X				
src,+ext	P: từ				X				X
src,-ext	P: khỏi				X				
gol	P: qua,...		X	X	X				X
ter	P: đến/tới		X	X	X				X
I	P: bằng					X			
C	P: với					X	X		
B	P: giùm/hộ							X	

CHART III-2 CR and CF Cooccurrences

These cooccurrences have restrictions related to verb classes. For example, OBJ and DAT can occur as NM only with OBJECTIVE-subject and DATIVE-subject verbs, respectively. INS, for the present analysis, can occur as NM only with AGENTIVE-subject verbs. BEN can occur as AC only with certain AGENTIVE-subject verbs, and INS can occur as AC only with OBJECTIVE-subject verbs of locomotion. LOC occurs as AC only with a particular set of OBJECTIVE-subject verbs and with locative AGENTIVE-subject verbs if the LOCATIVE noun is [+place,+relation] (see the preceding section on relator nouns).

The following sections set forth various verb classes and their co-occurrence restrictions with respect to CRs and CFs.

3.3 CLASSIFICATION OF VERBS

3.3.0 INTRODUCTION

As stated in the preceding section, cooccurrence restrictions for case forms (CF) and case relations (CR) are directly related to verb classes. In this section, an attempt is made to elucidate those verb classes which appear to be relevant to a discussion of Vietnamese co-verbs.

3.3.1 BASIS OF CLASSIFICATION

Verbs may be defined according to the cases with which they can or must occur. As noted in Sec. 2.1, Fillmore (1968:27) states that the case frames of verbs "have the effect of imposing a classification of the verbs in the language". They may also be defined in terms of inherent semantic features. Ramos (1973:110) states that the array of cases is not sufficient in itself to subclassify verbs. She considers the verb to be central and the semantic and selectional features of the verb to predict the types of cases that may occur with it. "Ultimately these semantic and selectional features subclassify the verbs."

The approach in this study has been to determine verb classes on the basis of the CRs and CFs with which they occur. This type of classification has been done previously by Taylor in his case grammar of Japanese (1971), by P. Li in his grammar of Rukai (1973), and by Kullavanijaya in her study of Thai verbs (1974). Taylor states, "The case-frame features assigned to lexical items...indicate both the case relationships and the case markers with which these items may occur; items which have any such features in common are members of the same subclass. It should be noted that such verb classification results in many verbs being members of a number of subclasses by virtue of the kinds of actants with which they may occur" (p. 26).

It has also been possible in this study to postulate semantic features which group the verbs into classes which coincide with the classes formed by the case cooccurrence restrictions. In fact, it seems reasonable to suppose that it is the semantic properties of verbs that ultimately determine their CR and CF cooccurrences, as claimed by Ramos. In the sections below, for each verb class, inherent semantic features are given in addition to the defining case frame of that class. The basis of the classification, however, is the cooccurrence of CRs and CFs.

The classification presented here is only a broad classification of certain verb classes and excludes many other classes of Vietnamese verbs. Only those classes and those distinctions within the classes which are relevant to the study of coverbs are presented. The semantic feature tree of verb classes in Sec. 3.3.6, for example, does not show that there are [+voluntary] verb classes not accounted for here.

3.3.2 [+voluntary] VERBS

In Vietnamese, and possibly in the verbs of all languages, there is a major division between those verbs which I will give the feature [+voluntary] and those which are [-voluntary]. That is, while all verb types (with minor exceptions) can take TIME and a non-Direction LOCATIVE, only [+voluntary] verbs can take INSTRUMENTAL, COMITATIVE, and BENEFACTIVE. Thus, we can have these redundancy rules:

RR 1	[+V]	→	$\begin{bmatrix} +_([+LOC]) \\ +_([-dir]) \\ +_([+TIM]) \end{bmatrix}$
RR 2	$\begin{bmatrix} +V \\ +volun \end{bmatrix}$	→	$\begin{bmatrix} +_([+INS]) \\ +_([+COM]) \\ +_([+BEN]) \end{bmatrix}$
RR 3	$\begin{bmatrix} +V \\ -volun \end{bmatrix}$	→	$\begin{bmatrix} -_([+INS]) \\ -_([+COM]) \\ -_([+BEN]) \end{bmatrix}$

Verbs which are [-voluntary] include copulative verbs, the existential-possessive verb, some classes of stative verbs, and some classes of non-stative DATIVE-subject verbs. This study is concerned with some of the classes of [+voluntary] verbs. The classes of [+voluntary] verbs not discussed in this study include some DATIVE-subject verbs and some statives.

3.3.3 SEMANTIC FEATURES AND CASE FRAMES

The classes of [+voluntary] verbs which are discussed in this section can be shown by a tree of semantic features. Below are given the case frame features assigned to verb lexical entries by the semantic features. Additional case frame features for individual verb classes are shown in Sec. 3.3.5.

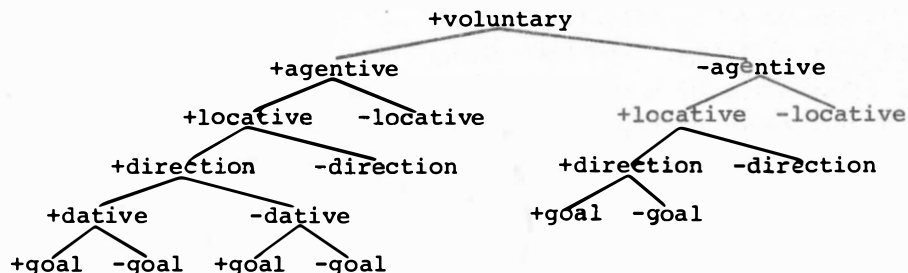


CHART III-3 Verb Semantic Feature Tree

[+agentive] : $\left[\begin{array}{l} +[+NM, +AGT] __ \\ + __ [+AC, +OBJ] \end{array} \right]$

Cf. Ramos (1973:123). Taylor (1971) uses what he calls "pseudo-features", abbreviations for case frames. This case frame in Taylor has the pseudo-feature 'transitive' (p. 175). Since DATIVE-subject verbs are also transitive, [+agentive] seems a more appropriate term.

[-agentive] : $[+[+NM, +OBJ] __]$

Taylor (1971:175) uses the term 'intransitive'.

[+locative] : $[+ __ ([+LOC])]$

Taylor (1971:175) uses the term 'movement'; however, my [+locative] verbs include location verbs, which are not movement verbs.

[-locative] : $[- __ [+dir, +LOC]]$

[+direction] : $[+ __ ([+dir, +LOC])]$

Taylor (1971:175) uses the term 'locomotion'. My 'direction' includes his 'locomotion' and 'transfer'.

[-direction] : $\left[\begin{array}{l} +location \\ - __ [+dir, +LOC] \end{array} \right]$

Taylor 1971 does not distinguish these [+location] classes.

$\left[\begin{array}{l} +dative \\ +goal \end{array} \right]$: $[+ __ ([+DAT])]$

Cf. Taylor 1971:182, 'transfer'; Ramos 1973:117, [+external, +centrifugal, -terminal].

[+dative]
[-goal] : [+__({[+DAT]
[+OBJ,+poss]})]

Cf. Taylor 1971:182, 'transfer'; Ramos 1973:121, [+external, -centrifugal, -terminal].

[-goal] : [+source]

In Sec. 3.3.5, the subclasses are given with their case frames and with example verbs and sentences. In Sec. 3.3.6, the semantic tree is given again with verb-class labels and an example verb for each class.

3.3.4 INNER AND OUTER CASES

3.3.4.1 Inner LOCATIVE and Outer LOCATIVE

Fillmore (1968:26, fn. 34) suggests a distinction between an "inner" highly restricting LOCATIVE, often associated with directional expressions, which is "inside the VP" and an "outer" weakly restricting LOCATIVE (associated with non-directional locational expressions) which is "outside the VP". Teng (1972), in his dissertation, "A Semantic Study of Transitivity Relations in Chinese", develops the distinction between inner and outer LOCATIVE, noting that, whereas "the outer Locative occurs freely...with all Action verbs,...inner Locative divides all action verbs into Locative and non-Locative" (p. 60).

Platt (1971:30-3), following Fillmore, also discusses different LOCATIVES in terms of "distance". He posits three degrees of location for English, as follows:

"Inner Locative: The Agent, if any, is not usually located at the Location indicated.

Outer Locative: The Agent is usually located at the Location indicated.

Far Outer Locative: There need be no Agent; it is freely permutable, independently of the other Locatives, to clause beginning or final position" (p. 33).

He further specifies that an inner LOCATIVE is obligatory and/or directional. It has been found for Vietnamese that, in terms of verb classes, a distinction between Outer and Far Outer LOCATIVE is not relevant. Outer LOCATIVE can be selected for any verb by RR 1 above. It has also been found that, although inner LOCATIVES - whether obligatory or optional - are usually directional, they can also occur with location markers with certain verbs. A directional and a locational inner LOCATIVE are shown in (3.82) and (3.83), respectively. (3.84) gives an outer LOCATIVE.

- (3.82) nó liệng sợi giấy qua sông
 3p throw Cl rope across river
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]
 'He threw the rope across the river.'

- (3.83) Lan bỏ kẹo ở trong hộp
 put candy in inside box
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+lcn] [+LOC]
 'Lan put the candy in the box.'

- (3.84) Lâm làm việc ở Sài Gòn
 do work in
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+lcn] [+LOC]
 'Lam works in Saigon.'

Kullavanijaya (1974:56) makes a distinction for Thai between strict inner locative, which is required by a specified group of verbs, and non-strict inner locative, which is optional but is implied by the lexical content of some verbs.

Inner LOCATIVE is usually associated with the OBJECTIVE case relation, whether OBJECTIVE is in the AC case form (as in (3.82) and (3.83) above) or the NM case form, as in (3.85).

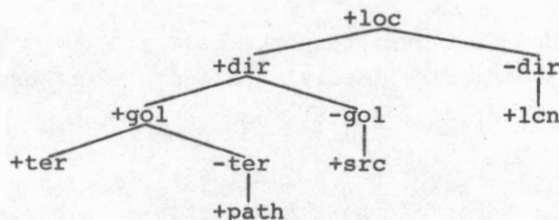
- (3.85) Lâm ngồi vào xe đen
 sit into car black
 [+NM] [+L] [+AC]
 [+OBJ] [+gol] [+LOC]
 'Lam sat in the black car.'

That is, inner LOCATIVE states the location, goal, or source of OBJECTIVE.

Inner LOCATIVE subclassifies [+voluntary] OBJECTIVE verbs and AGENTIVE verbs into locative and non-locative subcategories. Locative verbs have [+__([+LOC])] specified for their lexical entries by the semantic feature [+locative], and are further subclassified, according to the semantic feature tree in the preceding section, into Location, Source, and Goal verbs. Locative semantic features on locative Vs and [+L] Ps are related by the following subcategorisation and redundancy rules:

SR 1	[+loc]	+	[+dir]
SR 2	[+dir]	+	[+gol]
SR 3	[+gol]	+	[+ter]
RR 4	[-ter]	+	[+path]
RR 5	[-gol]	+	[+src]
RR 6	[-dir]	+	[+lcn]

giving the locative feature tree, as shown in Sec. 3.2.1.0:



(Chart III-1) Locative Feature Tree

In Vietnamese, the distinction between [+gol] '*toward*' and [+path] '*along, via*' is not overtly marked by any difference in case marker. This is frequently true of the distinction between [+gol] '*toward*' and [+ter] '*to, reaching*', although [+ter] can be made explicit by the use of the [+ter] sub-CF. This feature tree shows the close relationship between Goal and Terminus. It also shows the primary dichotomy between Location and Direction and the secondary dichotomy between Goal and Source.

3.3.4.2 DATIVE and BENEFACTIVE

The DATIVE and BENEFACTIVE cases play roles somewhat similar to those played by inner and outer LOCATIVE, respectively. Whereas DATIVE and inner LOCATIVE subcategorise verbs in a rather strict sense, BENEFACTIVE subcategorises verbs only very broadly and outer LOCATIVE can be said not to subcategorise verbs at all.

Fillmore (1968:26, fn. 34) states that outer LOCATIVE "is in some respects similar in its 'selectional' properties to what might be called the benefactive case B". However, he discusses this in terms of "dependency relations between cases" rather than in terms of what a particular verb allows in its case frame.

Teng (1972:59) includes DATIVE and inner LOCATIVE in a group of cases which he says define case frames. He includes BENEFACTIVE and outer LOCATIVE in a group which he states is "dependent" on the first group - again, dependency relations between cases.

Platt (1971:47-51) discusses Benefactive as the "perceived beneficiary of an action or state". His Benefactive includes my DATIVE, but he makes a distinction between Factitive Benefactives with verbs like *build*, *make*, *cook*, and *bake*, which occur with *for* in English (my BENEFACTIVE), as in

(3.86) *Joe is building a house FOR FRED.*

and Benefactives which imply change of ownership with verbs like *give*, *show*, and *donate*, which occur with *to* in English (my Goal DATIVE), as in

(3.87) *George showed a book TO MARY.*

In both of these Benefactives, the beneficiary becomes an Alienable Possessor. Another Benefactive involving Alienable Possession is the possessive, which is Agentless, as in

(3.88) *FRED has a car.*

Platt considers all three of these Benefactives to be inner Benefactives (p. 50). Benefactives not involving Alienable Possession, as in (3.89), are outer Benefactives.

(3.89) *I'll walk the dog FOR YOU.*

My distinction between inner (DATIVE) and outer (BENEFACTIVE) differs from Platt and has to do with case frames of verbs in Vietnamese. DATIVE is subject of the verb of possession *có* 'have', but my non-subject DATIVE is more restricted than Platt's Agent inner Benefactive, being available only to certain AGENTIVE verbs of direction and occurring only with the verb/preposition *cho* 'to' and some [+L] prepositions, not the [+B] prepositions. BENEFACTIVE is available to many classes of verbs, and may occur not only with *cho* but also with the prepositions *giùm/hộ* 'for', with the same meaning.

An explicit classification of verbs on the basis of inner LOCATIVE and DATIVE can be more clearly demonstrated in Chinese because of the position of these case relations relative to the verb. Inner LOCATIVE may occur before or after the verb; Outer LOCATIVE occurs only before the verb. Goal DATIVE may occur before or after the verb; BENEFACTIVE occurs only before the verb. (See Secs. 4.1 and 4.3.8, and Hashimoto 1971:19, Liang 1971:90-5, and Teng 1972:305.) Liang, Teng, and Y-C Li (1971) make verb classifications on the basis of postverbal occurrences of LOCATIVE and DATIVE.

The D case form in Chinese is *gěi* 'give; to, for'. Sentence (3.90), taken from Hashimoto 1971:19, with the AGENTIVE-DATIVE-Goal verb *sòng* 'send, give', has both BENEFACTIVE and DATIVE marked by the [+D] preposition; the proper interpretation depends on the ordering restriction mentioned above.

- (3.90) Zhāng Sān gěi Lǐ Sì sòng-le yī běn shū gěi Wáng Èr
for give- one Cl book to
Perf

$$\begin{bmatrix} +\text{NM} \\ +\text{AGT} \end{bmatrix} \quad [+D] \quad \begin{bmatrix} +\text{AC} \\ +\text{BEN} \end{bmatrix} \quad \begin{bmatrix} +\text{AC} \\ +\text{OBJ} \end{bmatrix} \quad [+D] \quad \begin{bmatrix} +\text{AC} \\ +\text{DAT} \end{bmatrix}$$

'Zhang San gave a book to Wang Er for Li Si.'

Since xīě 'write' is an AGENTIVE-DATIVE verb, (3.91), with the gěi phrase before the verb, is ambiguous.

- (3.91) wǒ gěi nǐ xiě xìn (Liang 1971:15)
I give you write letter

- a) 'I write a letter on your behalf.'
b) 'I write a letter to you.'

It may be disambiguated by replacing gěi with the P + 的 'on behalf of' for BENEFACTIVE, as in (3.92), or by having the gěi phrase follow the verb for DATIVE, as in (3.93).

- (3.92) wǒ tì nǐ xiě xìn (Liang 1971:15)
 [+NM] [+B] [+AC] [+AC]
 +AGT +BEN +OBJ

- (3.93) wō xǐě xǐn gěi nǐ (Liang 1971:15)
 [+NM] [+AC] [+D] [+AC]
 [+AGT] [+OBJ] [+DAT]

The verb *māi* 'buy' is not an AGENTIVE-DATIVE-Goal verb, so (3.94) is unambiguously BENEFACTIVE.

- (3.94) tā gěi wǒ mǎi shū (Liang 1971:34)
 3p for I buy book
 [+NM] [+D] [+AC] [+AC]
 [+AGT] [+BEN] [+OBJ]

'He buys a book on my behalf.'

If the gěi phrase occurs after the verb mǎi, as in (3.95), gěi cannot be a P, but instead can only be a verb which, with mǎi, expresses sequential action.

- (3.95) tā māi shū gěi wǒ (Liang 1971:35)
 3p buy book give I
 [+NM] [+V] [+AC] [+V] [+AC]
 +AGT +OBJ +DAT

'He buys books and gives them to me.'

The verb gěi, like Vietnamese cho, takes its DATIVE in the AC case form. Chao (1968:318) states, "The verb gěi 'give' itself does not take gěi 'to'...It is, however, quite common to have two verbal expressions in

series using *gěi* in both expressions". He gives the following example:

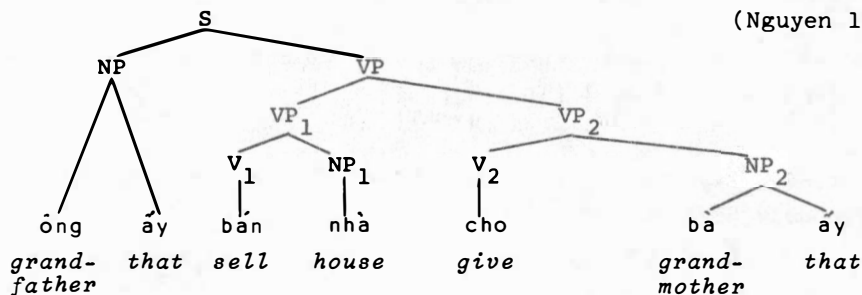
- (3.96) *gěi* qián *gěi* tā (Chao 1968:318)
 'give money to him'

He does not explain the contradiction between his first statement and his gloss of (3.96). Should (3.96) be translated 'give money, give (it) to him'?

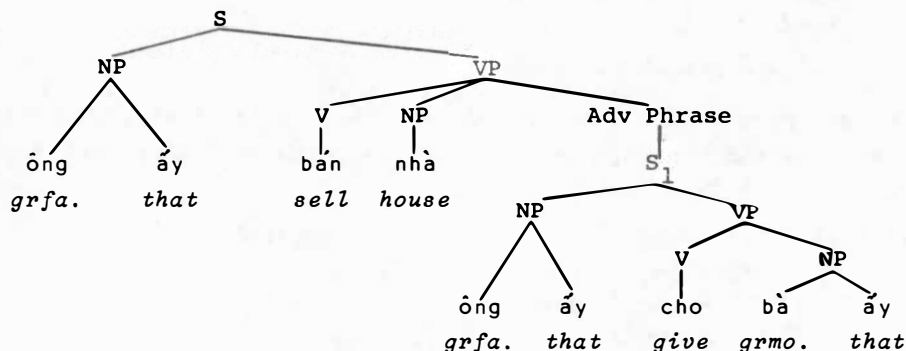
Nguyen D-H (1973:2) compares DATIVE (indirect object) and BENEFACTIVE in Vietnamese. His underlying structures for the ambiguous sentence (3.97) might be construed as support for the inner-outer notion. The *cho* of his DATIVE phrase (structure 1) shares main-verb status with the other verb, whereas his BENEFACTIVE (structure 2) is a separate embedded sentence which is attributed to the other verb and is therefore presumably optional and more "outer".

- (3.97) ông ấy bán nhà cho bà ấy (Nguyen 1973:1)
 grand- that sell house give grand- that
 father mother
 'He sold a house to/for her.'

- (1) (Nguyen 1973:2)



- (2)



When *cho* marks BENEFACTIVE, (3.97) can be disambiguated by using the [+B] *P* *giùm* or *hộ* instead of *cho*, as mentioned above.

For a further distinction between DATIVE and BENEFACTIVE, Nguyen D-H (1973:3) points out that when the object of *cho* is "second person" and *cho* marks BENEFACTIVE, the object of *cho* can be omitted when the sentence is "in a causative frame". For example,

- (3.98) ông ấy bán nhà cho bà
 grand- that sell house give grandmother
 father
 'He sells a house to/for you.'

which is ambiguous, can be

- (3.99) để ông ấy bán nhà cho (Nguyen 1973:3)
 let he sell house give
 'Let him sell a house for you.'

only when *cho* marks BENEFACTIVE: "The indirect object noun phrase can be deleted only...when it denotes the benefactive,...and *not* when it denotes the goal, the receiver, the recipient" (p. 3).

On the basis of the foregoing statements, it can be hypothesised that the distinction between DATIVE and BENEFACTIVE, like that between Inner and Outer LOCATIVE, belongs to the properties of a universal grammar, and that different languages show this distinction in different ways. One of the ways, shown for Vietnamese, Chinese, and English, is the optional use of distinct prepositions.

3.3.5 THE VERB CLASSES IN VIETNAMESE

3.3.5.1 AGENTIVE-DATIVE Verbs

As shown in the semantic feature tree in Sec. 3.3.3, there are two major classes of AGENTIVE-DATIVE (A-D) verbs: A-D-Goal verbs and A-D-Source verbs.

3.3.5.1.1 AGENTIVE-DATIVE-Goal Verbs

A-D-Goal verbs are those AGENTIVE verbs which can take a goal DATIVE, i.e. the animate goal or recipient of the action of the verb, in addition to their OBJECTIVE. These verbs are frequently called ditransitive verbs in other studies. In general, A-D-Goal verbs have the following semantic and case frame features (overleaf):

+voluntary
+agentive
+locative
+direction
+dative
+goal
+ [+NM, +AGT] ____
+ ____ [+AC, +OBJ]
+ ____ ([+AC +D +L, +gol] , +DAT)
- ____ [+AC] [+AC] +OBJ +DAT
+ ____ ([+L, +dir, +LOC])

As shown in the feature matrix, DATIVE can occur in the AC case form only immediately following the verb. Most of these case frame features are predictable in terms of semantic features and are specified for lexical items by lexical redundancy rules on verbs. They are given here in the verb matrix to more clearly show the distinctions between the verb classes discussed here.

A-D-Goal verbs include the following:

cho	<i>give</i>
gởi/gửi	<i>send</i>
đem	<i>carry, take</i>
mang	<i>carry</i>
khiêng	<i>(of two or more persons) carry a heavy thing</i>
phát	<i>distribute</i>
tin	<i>inform, send news</i>
viết	<i>write</i>
đưa	<i>hand, take</i>
tặng	<i>present, offer as a gift</i>
trao/giao	<i>deliver, entrust</i>
trả/giả	<i>pay, give back</i>
bán	<i>sell</i>
dạy	<i>teach</i>
kể	<i>relate, narrate, cite</i>
bảo	<i>say, tell</i>
hỏi	<i>ask</i>
trình	<i>report</i>
báo-cáo	<i>report</i>
chuyển(-đạt)	<i>convey, transmit</i>
truyền	<i>transmit, order</i>

chỉ point out, indicate
 chỉ-thì give directive

Some of the verbs, e.g. bán 'sell', dạy 'teach', and kể 'relate', cannot take inner LOCATIVES and cannot take their DATIVES in the L case form. Since an optional directional LOCATIVE is specified for A-D-Goal verbs by RR, verbs such as bán, dạy, and kể must have in their case frames the feature [-__[+dir,+LOC]]. They must also have [-__[+L,+DAT]].

Example sentences with some of the A-D-Goal verbs follow.

The DATIVE of the verb cho always occurs next to the verb and in the AC case form, as in (3.100).

(3.100) má cho con một cái bánh ngọt
 mother give child one CL cake sweet
 [+NM] [+AC] [+AC]
 [+AGT] [+DAT] [+OBJ]

'I'll give you a sweet cake, my child.'

With other A-D-Goal verbs, DATIVE immediately following the verb can occur in either the D or the AC case form, as in (3.101), and sometimes the order difference corresponds to a change of meaning (Nguyen D-H 1973:14).

(3.101) Lan gửi (cho) tôi một món quà ngon
 send to I one CL gift taste good
 [+NM] [+D] [+AC] [+AC]
 [+AGT] [+DAT] [+OBJ]

'Lan sent me a tasty gift.'

(3.102) Lan gửi quà qua tôi
 send gift across I
 to
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+DAT]

'Lan sent a gift over to me.'

(3.103) Lan gửi quà sang Mỹ
 send gift across America
 to
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]

'Lan sent a gift across to America.'

(3.104) Lan gửi quà sang Mỹ cho tôi
 [+NM] [+AC] [+L] [+AC] [+D] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]

'Lan sent a gift to America to me.'

(tôi in (3.104) can also be [+BEN]: 'Lan sent a gift to America (to somebody else) FOR me.')

An A-D-Goal verb can take a Source LOCATIVE, as in

- (3.105) em có gửi chị một bưu-ảnh từ Hoa-thị-nh-đốn
 young have send elder one postcard from Washington
 sib sis
 [+NM] [+AC] [+AC] [+L] [+AC]
 [+AGT] [+DAT] [+OBJ] [+src] [+LOC]

'I sent you a postcard from Washington.'

- (3.106) con đem cái dao này cho cô ngoài hiên đi
 child carry Cl knife this to miss outside verandah Imper
 [+NM] [+AC] [+D] [+AC] [+AC]
 [+AGT] [+OBJ] [+DAT] [+LOC]

'Take this knife to the girl out on the verandah, my child.'

The LOCATIVE in (3.106) is not an inner LOCATIVE of the verb *đem* but is a LOCATIVE attribute of the DATIVE noun *cô*.

- (3.107) con sẽ...đem xác ba xuống giữa sông (Shum
 child Fut take body father down middle river 1965:93)
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]

'I'll bring your body, father (as you ask, and throw it), into the middle of the river.'

- (3.108) khi biết ngày đi tôi sẽ tin cho cô rõ
 time know day go I Fut inform to miss clear
 [+AC] [+AC] [+NM] [+D] [+AC]
 [+TIM] [+OBJ] [+AGT] [+DAT]

'When I know the day I'm going, I'll let you know exactly.'

- (3.109) nó tin việc này về Sài-gòn (Nguyen-Dang Liem)
 3p inform matter this back to
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]

'He sent the information about this matter back to Saigon.'

- (3.110) ông-ấy viết thư cho cô-ấy
 he write letter to she
 [+NM] [+AC] [+D] [+AC]
 [+AGT] [+OBJ] [+DAT]

'He wrote letters to her.'

- (3.111) ông-ấy viết thư về Sài Gòn
 he write letter back to

[+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]

'He wrote letters back to Saigon.'

- (3.112) em sẽ trả lời cho người đó trước
 young Fut return word to person that first
 sib

[+NM] [+AC] [+D] [+AC]
 [+AGT] [+OBJ] [+DAT]

'I'll answer that person first.'

- (3.113) ông-ấy bán hai cái nhà cho tôi
 he sell two Cl house to I

[+NM] [+AC] [+D] [+AC]
 [+AGT] [+OBJ] [+DAT]

'He sold two houses to me.'

- (3.114) cô Xuân day toán cho Hương
 miss teach math to

[+NM] [+AC] [+D] [+AC]
 [+AGT] [+OBJ] [+DAT]

'Miss Xuan teaches mathematics to Huong.'

- (3.115) ông Phong báo-cáo tin-tức cho tôi
 sir report news to I

[+NM] [+AC] [+D] [+AC]
 [+AGT] [+OBJ] [+DAT]

'Mr Phong reported the news to me.'

Some of the A-D-Goal verbs allow optionality of OBJECTIVE, as shown in (3.116).

- (3.116) ...báo-cáo lên Tổng-thống (Nguyen D-H 1972:407)
 report up to national
 president

[+L] [+AC]
 [+gol] [+DAT]

'report to the President of the Republic'

- (3.117) thi-sĩ Xuan chuyên-đạt đến cô những lời khen thành-thật
 poet convey to miss Pl word praise sincere

[+NM] [+L] [+AC] [+AC]
 [+AGT] [+ter] [+DAT] [+OBJ]

'The poet Xuan sends you words of sincere praise.'

3.3.5.1.2 AGENTIVE-DATIVE-Source Verbs

Some of the AGENTIVE-DATIVE (A-D) Source verbs are

mua	buy
nhận	receive
thu	collect
tranh	take away
lấy	take from
ăn cắp	steal
cướp	rob
mượn	borrow
vay	borrow

These verbs are discussed in Nguyen D-H 1973 (9-13) as Verbs of Taking.

The source nouns of A-D-Source verbs in many languages are marked with [+L,+src] case markers; cf. English '*buy the book FROM her*', Japanese (Taylor 1971:412), Khmer (Sec. 6.2.1.4 in this study), and Thai (Sec. 6.2.2.4). This is not possible in Vietnamese, i.e. (3.118) is ungrammatical.

- (3.118) * *tôi mua sách từ ông Lâm*
 I buy book from sir
 '*I bought books from Mr Lam.*'

Source DATIVES in Vietnamese are commonly marked with a Genitive construction using the noun *của* 'property, possession of' (Nguyen 1973:11), as in (3.119) and (3.120).

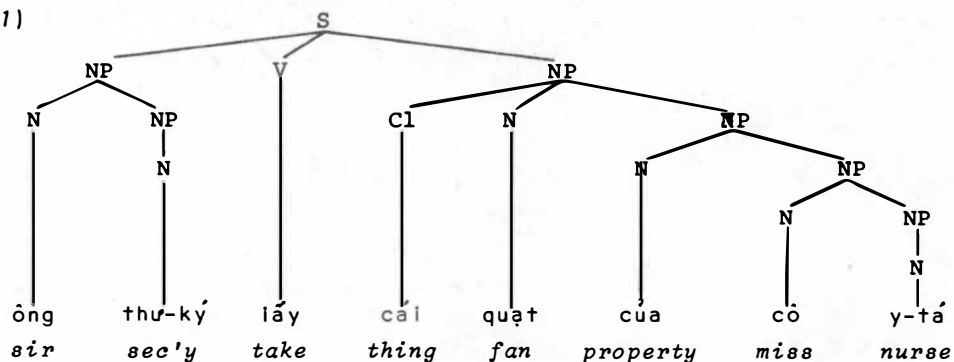
- (3.119) *tôi mua sách của ông Lâm*
 I buy book property sir
 '*I bought books of Mr Lam.*'

- (3.120) *ông thư-ký lấy cái quạt của cô y-tá* (Nguyen 1973:10)
 clerk take CL fan property female nurse

'*The clerk took a fan from the nurse.*'

(3.120) could also have the meaning '*the clerk took the nurse's fan*', in which case (3.120) would have the structure shown in (3.121) in which the Genitive phrase *của cô y-tá* modifies the noun *quạt*. However, for the first meaning given for (3.120), the structure of (3.120) is quite different from (3.121): *Của cô y-tá* does not modify the noun *quạt* but is a separate NP constituent from the NP of which *quạt* is the head, as is shown in (3.122), in which the Genitive phrase precedes the OBJECTIVE noun *quạt*.

(3.121)



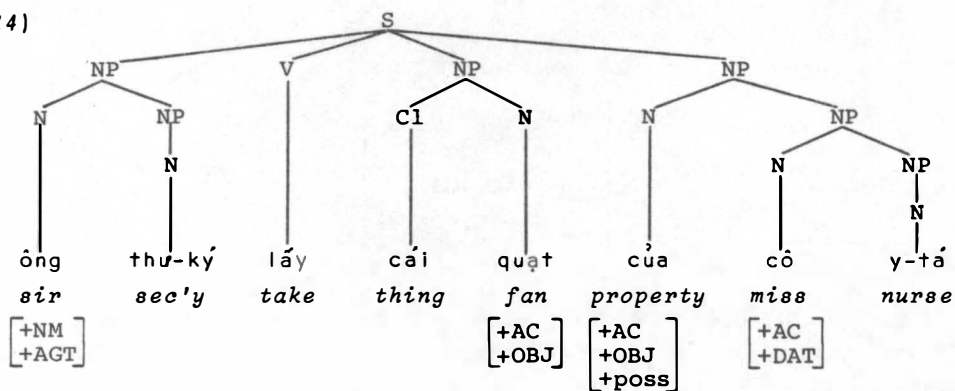
(3.122) ông thư-ký lấy của cô y-tá cái quạt (Nguyễn 1973:10)
 clerk take property nurse Cl fan
 'The clerk took a fan from the nurse.'

Also, the OBJECTIVE phrase, e.g. in (3.119), can be topicalised, leaving the Genitive phrase behind:

(3.123) cuốn sách này tôi mua của ông Lâm
 Cl book this I buy property sir
 'This book I bought from Mr Lam.'

We can say that the structure of (3.120) with the meaning given in (3.120) is (3.124).

(3.124)



'The clerk took a fan from the nurse.'

Của indirectly states a Genitive relationship between two nouns, the possessor (e.g. cô y-tá) and the possessee (e.g. cái quạt). Further, the possessor by definition always has a DATIVE case relation with the noun của. Relationships between nouns are outside the scope of the verb-noun case relationships discussed in this study. However, it can be stated that, because of coreferentiality between the Genitive noun của and the possessee (in the above examples, the OBJECTIVE noun), của has the same

noun precedes the OBJECTIVE of a non-mượn-type A-D-Source verb and is unmarked with a preposition, it also is unambiguously BENEFACTIVE, as tôi in (3.127).

- (3.127) cô-ấy mua tôi sách
 she buy I book
 $\begin{bmatrix} +NM \\ +AGT \end{bmatrix}$ $\begin{bmatrix} +AC \\ +BEN \end{bmatrix}$ $\begin{bmatrix} +AC \\ +OBJ \end{bmatrix}$
 $\left\{ \begin{array}{l} \text{'She bought me books.'} \\ \text{'She bought books for me.'} \end{array} \right\}$

3.3.5.2 AGENTIVE-LOCATIVE Verbs

3.3.5.2.1 AGENTIVE-LOCATIVE-Goal Verbs

AGENTIVE-LOCATIVE (A-L) Goal verbs have the feature matrix:

+voluntary
+agentive
+locative
+direction
-dative
+goal
+ [+NM, +AGT] ____
+ ____ [+AC, +OBJ]
+ ____ ([+L +AC, +rel], +LOC)]

The LOCATIVE of A-L-Goal verbs must have either [+L] or a locative relator noun (indicated by the feature [+relation] or [+rel]; see Sec. 3.2.3).

Following are some of the A-L-Goal verbs in Vietnamese:

để	put, place, leave
đặt	place, put
thọc	thrust, poke
ấn	thrust, press
bỏ	cast, put
vứt	throw away, discard
liệng	throw, cast, hurl
góp	contribute
dời	transfer, move
dọn	move, arrange
đậu	stop, part (vehicle)
lái	drive (vehicle) (sentence (3.35) above, Sec. 3.2.2.4.2)
chèo	oar, row, paddle

tìm	seek
áp	press against
treo	hang
dán	glue, stick
vẽ	draw, paint
viết	write

Although the case frame indicates that LOCATIVE is generally optional for A-L verbs, some of these verbs, such as *đẻ* 'put' and *thọc* 'thrust', have obligatory LOCATIVE - Kullavanijaya's strict inner locative (1974: 56; and Sec. 3.3.4.1 above).

The verbs *áp* 'press', *treo* 'hang', *dán* 'glue', *vẽ* 'draw', and *viết* 'write' can take their LOCATIVES only with the relator noun *trên* 'the top, the surface' or with the [+L,+gol] marker *vào* 'onto', as in (3.128) and (3.129).

(3.128)	nó	viết	vài	lời	trên	giấy	cho	ông	Hải
	he	write	some	word	top	paper	for	Mr	
	[+NM]			[+AC]	[+AC]		[+D]	[+AC]	
				[+OBJ]	[+LOC]			[+BEN]	
					[+rel]				
					vào	giấy			
					onto	paper			
					[+L]	[+AC]			
					[+gol]	[+LOC]			

'He wrote some words on paper for Mr Hai.'

(3.129)	nàng	áp	mặt	vào	cửa-sổ
	she	press	face	onto	window
	[+NM]		[+AC]	[+L]	[+AC]
			[+OBJ]	[+gol]	[+LOC]

'She pressed her face to the window.'

The [+gol] *vào* can also mean 'into', but in (3.128) and (3.129) it can mean only 'onto'; that is, because of the semantic properties of the verb *áp*, *vào cửa-sổ* in (3.129) cannot mean 'into the window opening' but only 'onto the window glass/frame' (Tôn-nữ Kim-Chi, personal communication).

On the other hand, a verb such as *thọc* 'thrust' usually takes the 'into' meaning of *vào*, as in (3.130).

(3.130)	nó	thọc	tay	vào	cửa-sổ
	he	thrust	hand	into	window
	[+NM]		[+AC]	[+L]	[+AC]
			[+OBJ]	[+gol]	[+LOC]

'He thrust his hand in through the window.'

thọc does not occur with the relator noun *trên*; i.e. (3.131) is ungrammatical.

- (3.131) * nó thọc gậy trên đất / bùn
 he thrust stick top earth mud
 [+NM] [+AC] [+AC]
 [+AGT] [+OBJ] [+LOC]

'He thrust a stick on the ground/mud.'

But *thọc* can occur with other relator nouns, for example, *trong* 'the inside', as in (3.132).

- (3.132) nó thọc gậy trong bùn
 [+NM] [+AC] [+AC]
 [+AGT] [+OBJ] [+LOC]

'He thrust a stick into the mud.'

It appears that the *P vào* has two distinguishing properties related to the subcategorisation of verbs. We might say that *vào* has the feature [+entering] which, by the rules

1. [+entering] + [±surface]
2. [-surface] → [+enclosed]

gives *vào* the features [+enclosed, +surface]; that *trên* has the feature [+surface]; that *trong* has the features [-surface, +interior]; and that the rules

3. $\left[\begin{smallmatrix} \{+V, +P\} \\ +enclosed \end{smallmatrix} \right] \rightarrow [+ ___ [+interior]]$
4. $\left[\begin{smallmatrix} \{+V, +P\} \\ +surface \end{smallmatrix} \right] \rightarrow [+ ___ [+surface]]$

apply to verbs and prepositions. Further, in addition to the feature $[+ ___ ([\begin{smallmatrix} +L \\ +AC, +rel \end{smallmatrix}], +LOC)]$, verbs such as *áp* seem to have a semantic property which modifies that feature as follows: $[+ ___ ([\begin{smallmatrix} +L \\ +AC, +rel \end{smallmatrix}], +LOC, +surface)]$. These features ensure that *áp*-class verbs will not occur with L case markers or locative relator nouns which do not have the feature [+surface], which is consistent with the facts of the language. See Sec. 6.2.2.1.1 for these rules in relation to Thai *khâu* 'into' and Sec. 6.2.2.1.3 regarding Thai *nay* 'inside'.

An interesting fact is that the A-L-[+surface] verb *viết* 'write' is also an AGENTIVE-DATIVE verb (see the preceding section) and it is one of the A-D verbs which take a directional LOCATIVE, as in (3.133).

- (3.133) nó viết thư vào Sài Gòn
 3p write letter into
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]

'He wrote a letter to Saigon.'

Thus, to account for the syntactic behaviour of *viết*, we might postulate that *viết*'s feature matrix would include the following features ([+surf] = [+surface]).

$$\left[\begin{array}{l} + _ ([\begin{array}{l} +AC \\ +D \\ +L, +gol \end{array}], +DAT) \\ + _ ([\begin{array}{l} +L \\ +AC, +rel \end{array}], +surf, +LOC) \\ + _ ([+L, +gol, -surf, +LOC]) \\ - _ [-surf] [+surf] \\ - _ [+DAT] [+LOC] \end{array} \right]$$

Should both LOCATIVES occur in the same sentence, the [+surf] LOCATIVE occurs before the [-surf] LOCATIVE and either LOCATIVE before DATIVE.

Examples of some of the other A-L verbs in sentences are given here.

- (3.134) *nàng để kẹo ở trong hộp*
she put candy in inside box
 $\left[\begin{array}{l} +NM \\ +AGT \end{array} \right] \quad \left[\begin{array}{l} +AC \\ +OBJ \end{array} \right] \quad \left[\begin{array}{l} +L \\ +lcn \end{array} \right] \quad \left[\begin{array}{l} +AC \\ +LOC \end{array} \right]$

'She placed the candy in a box.'

- (3.135) *để cả dưới gầm phản* (Thompson 1965a:201)
put all below space wooden
beneath camp bed
 $\left[\begin{array}{l} +AC \\ +OBJ \end{array} \right] \quad \left[\begin{array}{l} +AC \\ +LOC \\ +rel \end{array} \right]$

'Put (them) all (in the space) under the camp bed.'

- (3.136) *Hùng liệng sợi giây qua sông*
throw Cl rope across river
 $\left[\begin{array}{l} +NM \\ +AGT \end{array} \right] \quad \left[\begin{array}{l} +AC \\ +OBJ \end{array} \right] \quad \left[\begin{array}{l} +L \\ +gol \end{array} \right] \quad \left[\begin{array}{l} +AC \\ +LOC \end{array} \right]$

'Hung threw the rope across the river.'

- (3.137) *xin cho chim góp nhạc về trời*
please give bird donate music back to sky
 $\left[\begin{array}{l} +NM \\ +DAT \end{array} \right] \quad \left[\begin{array}{l} +AC \\ +OBJ \end{array} \right] \quad \left[\begin{array}{l} +L \\ +gol \end{array} \right] \quad \left[\begin{array}{l} +AC \\ +LOC \end{array} \right]$

'Please let the birds bring music back to the sky.'

(from Trịnh-Công-Sơn "Xin Cho Tôi" (song) 1966)

- (3.138) họ đón nhà đến khu khác
 they move house to area other
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+ter] [+LOC]

'They moved to another area.'

- (3.139) nó tìm được vàng ở dưới sông (Nguyen D-H
 3p seek obtain gold in below river 1972:399)
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+lcn] [+LOC]

'He found gold in the river.'

3.3.5.2.2 AGENTIVE-LOCATIVE-Source Verbs

Some of the A-L-Source verbs are:

bôi remove
 tẩy erase, remove, take out
 xóa erase, cross out
 nhổ pull up, extract

They have the following case frame (ext = extent; see remarks below regarding khối).

+voluntary
+agentive
+locative
+direction
-dative
-goal
+ [+NM, +AGT] _____
+ _____ [+AC, +OBJ]
+ _____ ([+AC, +rel [+L, +src, -ext], +LOC])

Frequently, the LOCATIVES of A-L-Source verbs are not marked overtly for Source, the only Source marking being on the verb itself, with the LOCATIVE marked only by a locative relator noun, as in (3.140) and (3.141).

- (3.140) cô-ấy xóa bài trên bảng đen
 she erase lesson top blackboard
 [+NM] [+V] [+AC] [+AC]
 [+AGT] [+src] [+OBJ] [+LOC]

'She erased the lesson from the blackboard.'

- (3.141) chị-ấy nhổ lúa ngoài đồng (Tôn-nữ Kim-Chi)
she pull up rice outside field
 [+NM] [+V] [+AC] [+AC]
 [+AGT] [+src] [+OBJ] [+LOC]

{ 'She's uprooting the rice from the field.'
 'She's out in the field uprooting rice.' }

As with A-D-Source verbs, the [+L,+src,+ext] P từ 'from' never occurs with A-L-Source verbs, i.e. (3.142) and (3.143) are ungrammatical.

- (3.142) * cô-ấy xóa bài từ bảng đen
she erase lesson from blackboard

- (3.143) * chị-ấy nhổ cây (ra) từ đất
she uproot plant out from earth
 [+NM] [+AC] [+Adv] [+L] [+AC]
 [+AGT] [+OBJ] [+ext] [+LOC]

'She pulled the plant out of the ground.'

However, as shown in the case frame, some A-L-Source verbs can occur with the [-extent] Source L case marker khỏi 'out of', as in (3.144).

- (3.144) chị-ấy nhổ cây (ra) khỏi đất
she uproot plant out out of earth
 [+NM] [+AC] [+Adv] [+L] [+AC]
 [+AGT] [+OBJ] [+src] [+LOC]
 [-ext]

'She pulled the plant out of the ground.'

In (3.145), trên is commonly used whereas ra khỏi is "snobbish" (Tôn-nữ Kim-Chi).

- (3.145) chị-ấy tẩy vết nhơ { trên áo } (T-n Kim-Chi)
she remove stain top dress
 [+NM] [+AC] [+AC]
 [+AGT] [+OBJ] [+LOC]
 { ra khỏi áo }
out out of dress
 [Adv] [+L] [+AC]
 [+src] [+LOC]
 [-ext]

'She removed the stain from her dress.'

3.3.5.2.3 AGENTIVE-LOCATIVE-Location Verbs

A-L-Location verbs include the following:

ăn	eat
nấu	cook, boil
chiên	fry
giặt	wash (clothes)
rửa	wash (object, parts of body)
gội (đầu 'head')	wash (hair)
may	sew
ủi	iron, press
câu	fish
làm	do, make
đọc	read
học	study
giữ	keep

Little investigation has been done on this class of verbs other than to identify it as a class on the basis of the verbs' ability to take optional inner locational LOCATIVES. The following case frame is proposed.

+voluntary
+agentive
+locative
-direction
+ [+NM, +AGT] ____
+ ____ ([+AC, +OBJ])
+ ____ ([+L, +lcn +AC, +rel], +LOC)]

A-L-Location verbs take their LOCATIVES with a [+L, +lcn] P or a locative relator noun ([+rel]; see Sec. 3.2.3).

Many of these verbs, unlike most of the AGENTIVE verbs of direction, have optional OBJECTIVES. They might have the feature [+durative], a term suggested by Susan Fisher (personal communication) for this type of verb with optional OBJECTIVE. Keedong Lee (1974b) discusses a distinction between verbs of "activity" (or atelic verbs - [+durative]) and verbs of "accomplishment" (telic verbs) on the basis of the distinctive use of resultative aspect markers, thus providing another possible basis for class distinction. Nevertheless, it is supposed that most of these verbs require OBJECTIVE when they have inner LOCATIVE, as in (3.146), since the inner LOCATIVE is the location of the OBJECTIVE, not the AGENTIVE.

(3.146)	nó	ăn	cháo	(ở)	trong	chén	lớn
	3p	eat	gruel	in	inside	bowl	big
	[+NM +AGT]		[+AC +OBJ]	[+L +lcn]	[+AC +LOC +rel]		

'He eats his rice gruel in a large bowl.'

- (3.147) nó ăn rồi
3p eat already

[+NM]
[+AGT]

'He's eaten already.'

Without the OBJECTIVE or a specifically understood OBJECTIVE, the inner LOCATIVE in (3.146) would become an outer LOCATIVE:

- (3.148) nó ăn trong chén lớn
3p eat inside bowl big

[+NM] [+AC]
[+AGT] [+LOC]
[+rel]

'He's in a big bowl eating.'

The inner LOCATIVE precedes an outer LOCATIVE, as in (3.149).

- (3.149) chị Hai rửa chén trong chậu ngoài hiên
elder two wash bowl inside basin outside verandah
sis

[+NM] [+AC] [+AC] [+AC]
[+AGT] [+OBJ] [+LOC] [+LOC]

'Second Sister is washing dishes in a basin out on the verandah.'

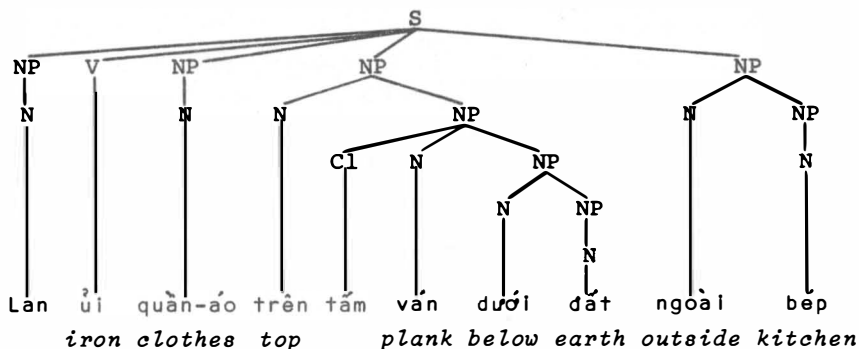
- (3.150) Lan ủi quần-áo trên tấm ván dưới đất ngoài bếp
iron pants-top Cl plank below earth outside kitchen
dress

[+NM] [+AC] [+AC] [+AC]
[+AGT] [+OBJ] [+LOC] [+LOC]

'Lan irons the clothes on a board on the floor out in the kitchen.'

Besides both inner and outer LOCATIVES, (3.150) has an included LOCATIVE; that is, dưới đất is a LOCATIVE attribute to the noun ván, as shown in the following structure.

- (3.151)



- (3.152) họ câu cá ngoài biển, trên sông, trong hồ và dưới ao
they fish fish outside sea top river inside lake and below pond
 [+NM] [+AC] [+AC] [+AC] [+AC] [+AC]
 [+AGT] [+OBJ] [+LOC] [+LOC] [+LOC] [+LOC]
 'They fish in the sea, in the river, in the lake, and in the pond.'

- (3.153) bác Hải làm nhà (ở) ngoài đồng
uncle make house in outside field
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+lcn] [+LOC]
 'Old Hai is building a house in the field.'

We know that ngoài đồng in (3.153) is an inner LOCATIVE because (3.153) can mean either that Old Hai is building the house himself or is having it built by someone else.

- (3.154) Lan giữ sách học (ở) trong tủ
keep book study in inside cabinet
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+lcn] [+LOC]
 'Lan keeps her textbooks in the cabinet.'

3.3.5.3 AGENTIVE Verbs

The [-locative] AGENTIVE verbs have the case frame:

+voluntary
+agentive
-locative
+ [+NM, +AGT] ____
+ ____ [+AC, +OBJ]

They include the following verbs:

săn	hunt (predate)
chơi	play
đánh	hit
giết	kill
cắn	bite (of animal)
xé	tear, tear up, rend
xẻ	split up, cut (up)
đan	knit, weave

Some of the AGENTIVE verbs, such as săn 'hunt' and chơi 'play', are [+durative] verbs - they do not have obligatory OBJECTIVES.

Some examples follow.

- (3.155) họ chơi bóng-rổ tuần rồi
 they play basketball week already

[+NM] [+AC] [+AC]
 [+AGT] [+OBJ] [+TIM]

'They played basketball last week.'

- (3.156) hội chơi với ba người phòng hờ (Nguyen V.K. 1964:1157)
 assembly play with three person make allowance for

[+NM] [+C] [+AC]
 [+AGT] [+INS]

'The team was playing three reserves.'

- (3.157) họ giết đồng-bào mình
 they kill compatriot self

[+NM] [+AC]
 [+AGT] [+OBJ]

'They kill their own countrymen.'

- (3.158) chó dữ đó cắn con tôi
 dog fierce that bite child I

[+NM] [+AC]
 [+AGT] [+OBJ]

'That fierce dog bit my child!'

3.3.5.4 OBJECTIVE-LOCATIVE-Goal Verbs

The OBJECTIVE-LOCATIVE (O-L) Goal verbs have the case frame:

+voluntary
-agentive
+locative
+direction
+goal
+ [+NM, +OBJ] ____
+ ____ ([+gol, +LOC])

They are subdivided into three groups, as follows:

(1) Those verbs which can take their LOCATIVES in either the L or the AC case form: [+ ____ ([+L, +AC], +LOC)].

(2) Those verbs whose LOCATIVES must occur in the AC case form: [+ ____ ([+AC, +LOC]), - ____ [+L, +LOC]].

(3) Those verbs whose LOCATIVES must have either [+L] or a locative relator noun (see Sec. 3.2.3): [+ ____ ([^{+L}_{+AC, +rel}], +LOC)]. Keedong Lee (personal communication) points out that verbs in this group are Manner of Locomotion verbs.

Verbs of group (1) include the following verbs:

đi go
ghé stop by
trèo climb
ngồi sit
nằm lie

Following are examples of these verbs in sentences.

- (3.159) Xuân đi (vào) Sài Gòn
to into

[+NM] [+L] [+AC]
[+OBJ] [+gol] [+LOC]

'Xuan went (down from north of Saigon) to Saigon.'

- (3.160) cô-ấy ghé nhà Hương một ngày chơi
she stop by house one day play

[+NM] [+AC] [+AC]
[+OBJ] [+LOC] [+TIM]

'She stopped by Huong's house for a day to visit.'

- (3.161) họ ngồi (vào) xe
they sit into vehicle

[+NM] [+L] [+AC]
[+OBJ] [+gol] [+LOC]

'They're sitting in the car.'

Although ngồi 'sit' and nằm 'lie' can take a [+gol] preposition, they can also take a [+lcn] preposition, as in (3.162).

- (3.162) Lan nằm ở trên giường
lie in top bed

[+NM] [+L] [+AC]
[+OBJ] [+lcn] [+LOC]

'Lan's lying on the bed.'

(3.163) has both an outer and an inner LOCATIVE.

- (3.163) ở Sài Gòn nó thường đi Chợ Lớn
in 3p usual go

[+L] [+AC] [+NM] [+AC]
[+lcn] [+LOC] [+OBJ] [+LOC]

'In Saigon, he often goes to Cholon.'

Verbs of group (2), whose LOCATIVES must occur in the AC case form, might be called Direction of Locomotion verbs. (They are discussed in detail in Sec. 5.3.2 below.) They include the following verbs:

qua/sang	go across
ra	go out
xuống	go down
đến/tới	arrive at
về	return, go back

Examples of these verbs in sentences follow.

- (3.164) Lan sang Mỹ học
cross America study

[+NM]
[+OBJ]

[+AC]
[+LOC]

'Lan went to America to study.'

- (3.165) đoàn hướng-đạo xuống tận miền nam
group guide go down extreme region south
point

[+NM]
[+OBJ]

[+AC]
[+LOC]

'The Boy Scouts went all the way down south.'

- (3.166) tôi sẽ đến phi-trường
I Fut arrive airport

[+NM]
[+OBJ]

[+AC]
[+LOC]

'I'll come to the airport.'

In its lexical entry, đến is [+terminus], which is [+goal] by implication.

Verbs of group (3) include the following verbs:

bay	fly
nhảy	jump, dance
bước	step
lội	swim, wade, wallow
chạy	run
chảy	run, flow
té	fall (person)
rơi	fall (leaves, rain)
lã-chã	trickle, drip (tears)
lìệng	hover, soar (bird, plane)
đậu	perch (bird)
áp	approach, be pressed

Some of the O-L-Goal verbs, such as lìệng 'soar', đậu 'perch', and áp 'approach', have corresponding A-L-Goal verbs (see Sec. 3.3.5.2.1 above). It is believed that the A-L verbs are derived from the O-L

verbs by transitivity derivation (see Kullavanijaya 1974:166ff).

Following are examples of O-L-Goal group (3) verbs in sentences.

(3.167) con cò bay vào ruộng

Cl crane fly into field

[+NM] [+L] [+AC]
[+OBJ] [+gol] [+LOC]

'The cranes flew into the field.'

(3.168) chim bay trên trời

bird fly top sky

[+NM] [+AC]
[+OBJ] [+LOC]
[+rel]

'Birds are flying in the sky.'

(3.169) nó chạy vào cửa hàng xe đạp (Nguyen D-H 1966:527)

3p run into door store bicycle

[+NM] [+L] [+AC]
[+OBJ] [+gol] [+LOC]

'He ran into the bicycle shop.'

(3.170) sông này chảy ra biển

river this flow out sea

[+NM] [+L] [+AC]
[+OBJ] [+gol] [+LOC]

'This river flows into the sea.'

(3.171) mưa đang rơi ngoài nhà

rain Prog fall outside house

[+NM] [+AC]
[+OBJ] [+LOC]
[+rel]

'It's raining outside.'

(3.172) nước mắt mẹ già lã-chã...trên xác con lạnh giá

water eye mother old trickle top corpse child cold cold

[+NM] [+AC]
[+OBJ] [+LOC]
[+rel]

'The tears of the mother trickle on the cold body of her son.'

(from Phạm Duy "Giọt Mưa Trên Lã" in Mười Bài Tâm Ca (songs), 1965)

The OBJECTIVE class includes such verbs as the following:

cháy	<i>burn</i>
chết	<i>die</i>
khóc	<i>cry</i>
ngủ	<i>sleep</i>

Following are some examples.

(3.179) ông-ấy chết hôm qua
he die day past

[+NM]
 [+OBJ]

[+AC]
 [+TIM]

'He died yesterday.'

(3.180) nó khóc nhiều, rồi ngủ
he cry much already sleep

[+NM]
 [+OBJ]

'He cried a lot then went to sleep.'

3.3.6 SUMMARY OF VIETNAMESE VERB CLASSES

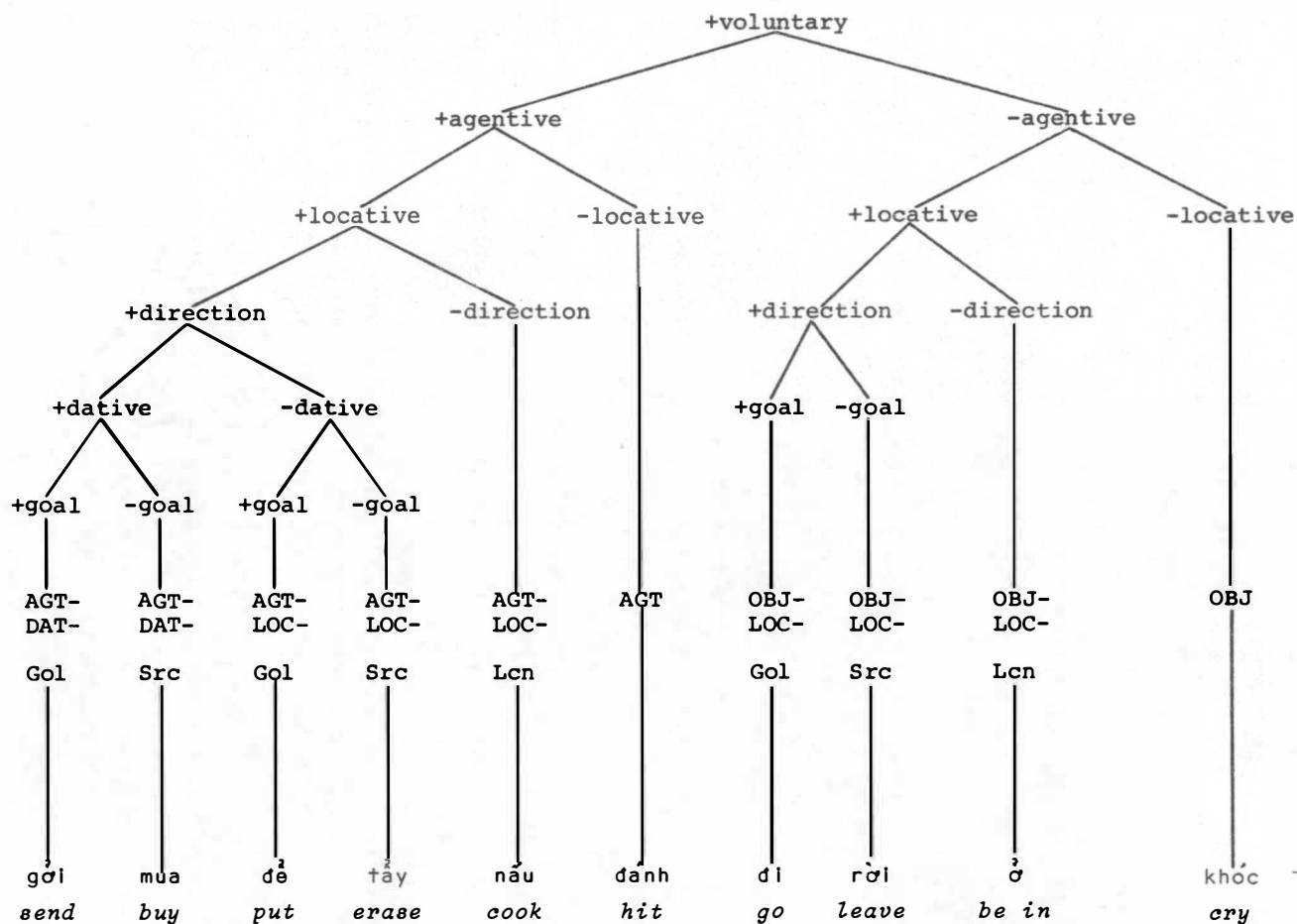


CHART III-4 Semantic Tree of Ten [+voluntary] Verb Classes in Vietnamese

CHAPTER IV

COVERBS

4.1 BACKGROUND AND DEFINITION

The term "coverb" was first used by teachers of Chinese language (see, for example, Hockett & Fang 1945, *Spoken Chinese*, and DeFrancis 1963, *Beginning Chinese*) to describe a verb which

- 1) occurs as a secondary verb preceding the main verb in a sentence,
- 2) is followed by a noun phrase with which it forms a constituent,
- 3) can be translated as a preposition in English.

DeFrancis (1963:83) gives this description: "Coverbs are transitive verbs which precede the main verb of the sentence. Some coverbs, such as *zài* '(be) at', are sometimes used as full verb; a few are never anything but coverbs. All can be translated as prepositions in English." (4.1) is an example,

- (4.1) *tā zài Zhōngguó niàn shū* (Teng 1972:72)
he be in China read book
'He's studying in China.'

where *zài* is the coverb, *zài Zhōngguó* is the "coverb phrase", and *niàn* is the main verb.

Though the term "coverb" is used to some extent in linguistic studies of Chinese (Y-C Li 1971; Liang 1971; C. Li & Thompson 1973a,c, etc.), the term "preposition" is a more common one for such secondary verbs (Chao 1968, Ch'en 1972, A. Hashimoto 1971, Teng 1972, and C. Li & Thompson 1973a-c, etc.).

There are three coverbs in Mandarin Chinese which are directly relevant to a study of coverbs and the classification of verbs in Vietnamese. They are *zài* 'in, at', *dào* 'to', and *gěi* 'for, to'. It is these three coverbs which can also occur in phrases following the main verb instead of preceding it, in which case they are called "postverbs" by Y-C Li

(1971:3) and "complements" by Chao (1968:326,753). Below are examples of *zài*, *dào*, and *gěi* in both positions.

- (4.2) niǎo zài tiān-shang fēi (Liang 1971:89)
bird be in sky on top fly
'Birds fly in the sky.'
- (4.3) tā zhù zài Táizhōng (Y-C Li 1971:3)
he live be in Taichung
'He lives in Taichung.'
- (4.4) nǐ dào wǒmen jiā lái hái shì wǒ dào nǐmen jiā qù (Chao 1968:756)
you to we house come or I to youPl house go
'Will you come to our house or shall I come to yours?'
- (4.5) tā zǒu dào jiā lǐ (Chao 1968:753)
he walk to house inside
'He went into the house.'
- (4.6) wǒ gěi tā sòng xìn (Chao 1968:326)
I to he send letter
'I sent a letter for him.'
- (4.7) wǒ sòng xìn gěi tā (Chao 1968:326)
I send letter to he
'I sent a letter to him.'

There is some justification in making a grammatical distinction between the occurrence of these coverbs before the main verb and the occurrence after. As noted above in Sec. 3.3.4.1 in the discussion on LOCATIVE, Teng (1972:59-61) makes a distinction between inner and outer LOCATIVE, stating that inner LOCATIVE subcategorises verbs whereas outer LOCATIVE occurs freely with most verbs. In Chinese, the locative preposition or coverb phrase occurring before the verb can be an inner or an outer LOCATIVE, whereas the phrase occurring after the verb is always an inner LOCATIVE (Teng 1972:17). According to Chao's translations of (4.6) and (4.7) above, *gěi* in (4.6), preceding the verb, marks BENEFACTIVE, which can be considered to be parallel to outer LOCATIVE in that it occurs with most verb types. In (4.7), where *gěi* follows the verb, it marks DATIVE, which subcategorises a certain class of AGENTIVE verbs; that is, DATIVE appears in their lexical entries. The coverb *gěi* was discussed in Sec. 3.3.4.2, DATIVE and BENEFACTIVE.

Teng (p.60) gives the following examples of LOCATIVE, in which (4.8) and (4.9) contain outer LOCATIVES, (4.10) is ungrammatical, and (4.11) contains an inner LOCATIVE with the verb *xiě* 'write', which has an optional LOCATIVE in its lexical entry matrix.

- (4.8) tā zài pùzi - lì mǎi dōngxī
 he loc.v store inside buy thing
 'He is buying things in the shop.'
- (4.9) tā zài jiàoshì - lì xiě zì
 he loc.v classroom inside write word
 'He is writing in the classroom.'
- (4.10) * tā bǎ dōngxī mǎi zài zhuōzi - shàng
 he pre- thing buy loc.v table top
 trans.
 'He bought the thing (and put it) on the table.'
- (4.11) tā bǎ zì xiě zài zhuōzi - shàng
 he pre- word write loc.v table top
 trans.
 'He wrote the word on the table.'

The classification and analysis of these preposition-like verbs is difficult because some of them, including the three given above, can also occur as main verbs (see DeFrancis' description cited above). Examples of *zài*, *dào*, and *gěi* used as main verbs are given here.

- (4.12) tā jiā zài nǎr (DeFrancis 1963:69)
 he house be at where
 'Where is his house?'
- (4.13) tā jiā zài chéng wàitōu (DeFrancis 1963:70)
 he house be at city outside
 'His house is outside the city.'
- (4.14) dào le nà lì, xiàng yǒu biān zǒu
 arrive Compl there inside toward right side go
 'Arriving there, go to the right.' (Hockett 1945:45)
- (4.15) wǒ gěi tā táng (Li & Thompson 1973a:3)
 I give he candy
 'I give him candy.'

4.2 THE COVERB PROBLEM

As stated in Sec. 1.1, one of the problems with which this study is chiefly concerned is the determination of the syntactic role of coverbs, especially in Vietnamese.

Before one can accurately formulate statements regarding coverbs, it is necessary to determine the categorial nature of coverbs, the ways

they function syntactically, the relationship between coverbs and their corresponding verbs, and how they function in the classification of verbs.

Discussions about coverbs have explicitly or implicitly centered around the following question:

Is a sentence containing a coverb

- 1) a complex sentence with embedding, i.e. a) the coverb being the main, or higher, verb, or b) the coverb being an embedded verb;
- 2) a single matrix sentence containing a verb phrase series - that is, two verbs in series; or
- 3) a single-verb sentence containing a prepositional phrase in which the coverb is a preposition, or case marker?

In Chinese linguistics, the term "coverb" has been used to designate all words which occur in a preposition-like use, whether or not there exists for a particular word a use as main verb. In this study, I will restrict my attention to those "coverbs" which have corresponding verbs, and limit the use of the term "coverb" to these in their non-main-verb function.

Previous solutions for Vietnamese are given and evaluated in terms of these questions in Sec. 5.2 below. However, more work has been done specifically on coverbs in Chinese, so these solutions are discussed in the following section. This will provide a background and a framework within which to evaluate the analyses proposed for coverbs in Vietnamese.

4.3 ANALYSES OF CHINESE COVERBS

4.3.1 YUEN REN CHAO

Chao (1968:749-51) gives as the most important properties of prepositions: 1) they do not as a rule have aspects; 2) they do not usually function as centres of predicates; and 3) they do not usually omit their objects, "as an ordinary transitive verb normally does when the object is in the near context". Chao considers the coverbs preceding the main verb to be verbs functioning as prepositions, and that the prepositional phrase (the preposition plus its object) modifies the verb. In regard to the coverbs *zài* 'at' and *dào* 'to', the modification has the meaning 'time when' or 'place where' (pp. 336-8); with *gěi* 'for', the prepositional phrase means 'interest' or 'benefit' (p. 339). Such constructions he calls subordinate constructions, which have their centre in the second constituent, with the first verb as modifier, "translatable as a preposition" (p. 326).

When these coverbs occur after the main verb, they are verb-complement constructions (Chao 1968:326), in which the first verb is the centre of the construction and the second verb (also called preposition (p. 754)) and its object form a complement in a verb-verb series. The second verb (or preposition) is "often compounded enclitically" with the preceding verb (pp. 754, 317), as in (4.16), where *gěi* 'to' is suffixed to the verb *sòng* 'send'.

- (4.16) *sòng-gěi tā yī-fèn lǐ* (Chao 1968:317)
send to he one CL present
'send-to him a gift'

However, when the second verb is separated from the main verb and the direct object immediately follows the main verb, as in (4.17), he says this is a "different matter" - a case of "two verbs, each with an object to itself" (p. 317).

- (4.17) *sòng yī-fèn lǐ gěi tā* (Chao 1968:316)
send one CL present to he
'send a gift to him'

In either case, whether *gěi* and its object immediately follow the main verb or follow the direct object, they constitute a complement to the main verb. Chao lists those verbs which obligatorily or optionally take *gěi* with their indirect objects if the indirect object immediately follows the main verb, those which do or do not take *gěi* "according to the direction to or from the indirect object" (p. 317), and those which never take *gěi* with their indirect objects.

Regarding *zài* and *dào* having the meaning of 'time when' or 'place where', he states that when they are the first verb they mean 'at, from, by', and when they are complements they mean '(up) to' (p. 337).

It is not clear from Chao's various discussions whether his analysis of coverbs following the verb would fit most readily into solution (2) (two verbs in series) or solution (3) (a single verb and a prepositional phrase) above. He considers such sentences to contain a verb-verb series, but he also refers to the second verb as a preposition and the second verb plus its object as a prepositional phrase ("K-O phrase", K = P). Although he discusses prepositions as distinct from verbs (see above), he does not make this distinction clear in his analysis of co-verbs. Chao makes no observations regarding constituent structure of sentences with coverbs.

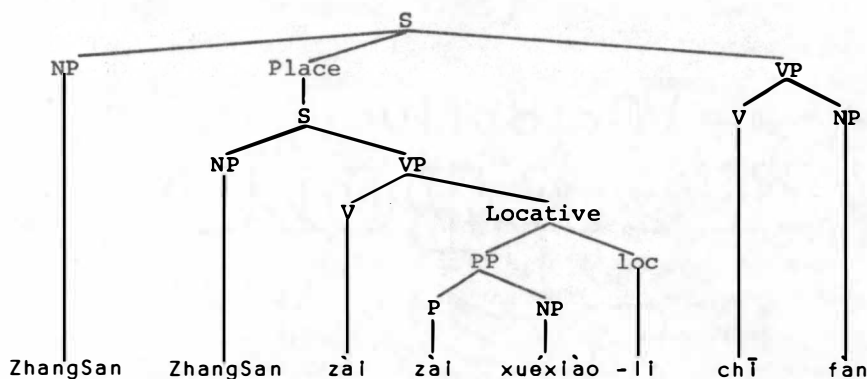
4.3.2 ANNE Y. HASHIMOTO

Hashimoto (1971:57-8) also makes the distinction between the occurrence of *zài* preceding the verb and *zài* following the verb. Since *zài*

cannot be negated when it follows the verb, she states it is a preposition and that the "whole locative expression" is a prepositional phrase which is derived from the VP constituent - that is, the locative phrase is immediately dominated by VP.

When *zài* occurs in preverbal position as the sentence adverbial "Place", Place is a constituent immediately dominated by Sentence. In such a case *zài* is derived from an underlying sentence with *zài* as the locative verb. She postulates that when *zài* is the main verb of a sentence, it is always followed by a locative phrase in which the locative preposition *zài*, identical in form with the locative verb, occurs in the deep structure and is obligatorily deleted in the surface structure (p. 8). Her postulated deep structure of (4.18) is shown in the tree below.

(4.18) Zhang San *zài* xuéxiào-lì chī fàn (Hashimoto 1971:57-8)
 locate school-in eat rice
 'Zhang San eats rice in school.'



Postulating a deep structure preposition which is homophonous with its verb and which never appears on the surface seems unnecessarily abstract, but, although Hashimoto does not refer to case grammar, it is consistent with the Fillmore 1968 model in which every case has an underlying preposition.

When *zài* or *dào* in preverbal position mark Time, they are prepositions in a PP which is dominated by Sentence (pp. 93, 145).

In postverbal position, *zài* is a locative preposition in a locative phrase "derived from" the VP (p. 57), as can be seen in the diagram of (4.18) above. Also shown is the fact that she considers the localiser (relator noun, according to my analysis) to be a unique category 'loc', dominated by the locative phrase but outside the PP.

The verb *dào*, occurring after another verb, can be reduced to the particle *de*, marking an Extent complement and taking a following Sentence.

4.3.3 YING-CHE LI

Li, in his case grammar of Chinese (1971), defines a coverb as a verbal element which does not function as a main verb but "enters into construction with a noun phrase", which construction he calls a "coverb phrase" and states that it modifies the verb (p. 2). His definition of coverb includes only those coverbs which occur before the verb. Those which occur after the verb (zài 'in', dào 'to', gěi 'to') he calls postverbs, but states that the postverb phrase is "similar" to the coverb phrase, and, further, that he considers a phrase with zài or dào, "whether occurring as a coverb phrase or postverb phrase, as the same L phrase in the deep structure" (p. 29).

Li considers coverbs and postverbs to be case markers. He notes that the occurrence of the locative case markers zài and dào and the dative case marker gěi as postverbs depend on the kind of main verb. Verbs such as zǒu 'walk', zuò 'sit', tǎng 'lie', and fàng 'put' take postverbal locatives. Locative "seems to associate with the motion verbs (intransitive locomotion verb class) in a more definite way than with other kinds of verbs... L co-occurs with them in the deep structure" (pp. 89-90). He states that the postverb gěi occurs with "a verb like sòng 'to give', which predicts the occurrence of D in the deep structure" (p. 43).

In accordance with the practice in Fillmore case grammar up until 1968, Li considers every case to have a case marker in the deep structure, which is deletable on the surface under certain conditions.

Thus, Li's analysis appears to be closest to solution (3) above: A sentence containing a coverb is a single-verb sentence containing a case-related phrase in which the coverb is the case marker.

4.3.4 CHARLES T.C. TANG

Tang, in his *Case grammar in Mandarin Chinese* (1972), like Li, considers what I am calling coverbs to be case markers derivable from Fillmorean case labels which expand as K + NP, where K is a case marker. He cites gěi 'to' as D (Dative) and zài 'at, in, on' as L (Locative). He does not list dào.

He specifies (p. 153) certain verbs as having in their case frames Dative: sòng 'send', or Locative: fàng 'put', lái 'come', qù 'go'.

Tang observes that, by using this framework, we can have a simpler base by "eliminating such language-specific constituents as prepositions, coverbs, postverbs, localizers from the base rules" (p. 170).

Tang's solution most closely fits with solution (3) above: the co-verbs are case markers (my "prepositions") in a single-verb sentence.

4.3.5 SHOU-HSIN TENG

Teng (1972) discusses transitivity relations in Chinese in terms of Chafe (1970), who considers the verb to be central and, by its internal semantic structure, to specify what semantic roles (i.e. case relations) will occur with it. Verbs are classified as to whether they are "state" ('he *is* TALL'), "action" ('he *CRIED*'), "process" ('he *DIED*'), or "process action" ('he *broke a dish*'). Action verbs require accompanying Agents; process and state verbs require accompanying Patients. Verbs are further subcategorised by Experiential, Benefactive, Locative, Goal (my DATIVE), etc.

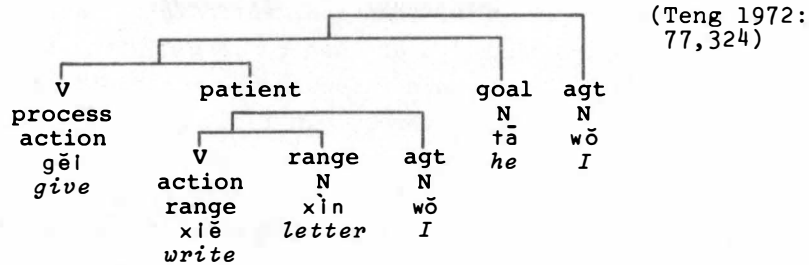
Teng talks about inner and outer Locative in terms of inner Locative being specified by verb features and thus dividing "all action verbs into Locative and non-Locative" (p. 60). Examples of Locative verbs are xiě 'write', fàng 'put', and guà 'hang'. Outer Locative occurs freely with all verbs. In Chinese, "pre-verbal locatives may be defined as outer Locative and post-verbal locatives as inner Locative... inner Locative may be pre-posed to the pre-verbal position [sic], outer Locative may not be post-posed" (pp. 17-18). In other words, when zài and dào phrases occur after the verb they are inner Locative. When gěi occurs after the verb, it is unambiguously Goal, as in (4.20).

- (4.20) wǒ xiě - le yì - fēng xìn gěi tā (Teng 1972:305)
 I write Asp one CL letter give 3p
 'I wrote him a letter.'

(xiě is noted above as being a Locative verb; however, it can also take Goal.) "Goal may occur either pre-verbally or post-verbally, in many cases at least, but Benefactive occurs only pre-verbally" (p. 305). Therefore, (4.21) is ambiguous.

- (4.21) wǒ gěi tā xiě - le yì - fēng xìn (Teng 1972:301)
 I give he write Asp one CL letter
 'I wrote a letter to/for him.'

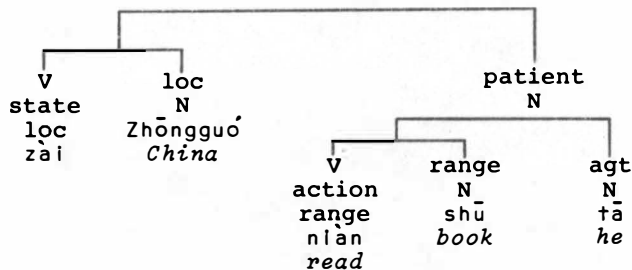
Teng considers outer Locative and Benefactive to be higher verbs, as in solution (1a) above. If gěi in (4.21) marks Benefactive, the sentence would have the following structure, in which gěi 'give' is a process action verb which takes an embedded sentence under a Patient node (Patient = "that which undergoes change of state", Goal = "a recipient" (p. 264)).



The embedded verb *xiě* 'write' is an action range verb (Range = the extent of the verb's scope of reference (p. 184)). Teng does not give an underlying structure for inner Locative or Goal, but he does state, "the relation Goal always introduces the preposition *gěi*, which will always be identical to the 'highest' verb in Benefactive sentences" (p. 78).

The structure of (4.22), which has an outer Locative, is also given.

- (4.22) *tā zài Zhōngguó niàn shū* (Teng 1972:72)
he loc.v China read book
'He is studying in China.'



It seems, then, for Teng, "outer" relations (some preverbal occurrences of coverbs) are higher verbs (solution (1a) above), and "inner" relations (postverbal occurrences of coverbs) are prepositional phrases, solution (3) above.

4.3.6 JAMES CHAO-PING LIANG

Liang's 1971 dissertation treats specifically of coverbs and the question raised in Sec. 4.2 above. Stating that all the coverbs were assuredly verbs at an earlier stage in the Chinese language (p. 29), he asks if a coverb is actually a verb in the modern language and, if so, whether it is the main verb. If it is not a verb, he asks what its syntactic function is. "In asking this set of questions, we are questioning the validity of postulating a grammatical category of preposition in Chinese" (p. 51). He concludes that none are prepositions, that all of the three Chinese coverbs that we are concerned with are finite

verbs except *gěi* in preverbal position, which is a "passive marker".

Although he states that "we are not concerned with the classification of verbs" (p. 89), he does note cooccurrence restrictions between these coverbs and certain kinds of verbs. In fact, he sets up (pp. 90-5) classes of verbs which can have a *zài* phrase preceding or following the verb and those which are restricted in respect to coverb position. Verbs which can have *zài* preceding or following without change of meaning belong to the static intransitive verb class - *zuò* 'sit', *zhàn* 'stand', *shuì* 'sleep', *zhù* 'live', etc. *Zài* means 'location of the action of the verb' when it precedes the verb and 'destination of the action of the verb' when it follows the verb with the motion intransitive verb class - *fēi* 'fly', *zǒu* 'walk, go', *pǎo* 'run', etc., and the motion transitive verb class - *fàng* 'put', *dīu* 'throw', *bān* 'move'. *Zài* cannot follow verbs of the static transitive verb class - *kàn* (shū) 'read', *chī* (fàn) 'eat', etc. (p. 92). Examples are given here with static intransitive verb *zhù*, (4.23), and the static transitive verb *kàn*, (4.24).

(4.23) *wǒ zài Shànghǎi zhù* (Liang 1971:88)

I be at live

wǒ zhù zài Shànghǎi

I live be at

'I live in Shanghai.'

(4.24) *wǒ zài jiā kàn shū* (Liang 1971:35)

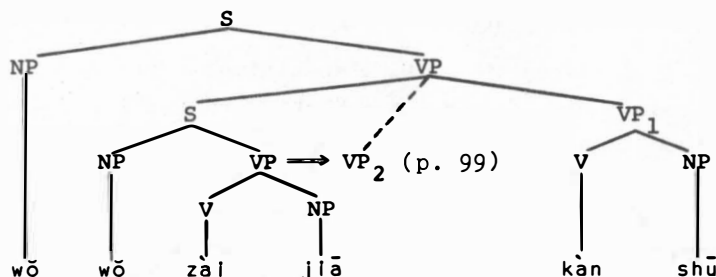
I be at home read book

* *wǒ kàn shū zài jiā*

I read book be at home

'I read at home.'

He gives the following deep structure for "a V-V type of sentence containing a *zài*-phrase" (p. 97).



When the identical NP is deleted, *zài jiā* becomes a second VP. His "presurface structure" (p. 99) implies a verb-verb series, but he states

Dào in first position also indicates location of the action of the second verb. However, in first position dào is the "main" verb instead of an embedded verb like zài (p. 188), although his structure and translation for (4.25) shows dào to be the first verb in a verb-verb series, that is, the first of two main verbs.

- (p. 186)
-
- The first tree (S₁) has a root node S branching into S₁ and S₂. S₁ branches into NP (ta) and VP (dao, tushuguan, kan). S₂ branches into NP (ta) and VP (kan, shu).
- ```

graph TD
 S --> S1
 S --> S2
 S1 --> NP1[NP]
 S1 --> VP1[VP]
 NP1 --> ta1[ta]
 VP1 --> dao[dao]
 VP1 --> tushuguan[tushuguan]
 VP1 --> kan[kan]
 S2 --> NP2[NP]
 S2 --> VP2[VP]
 NP2 --> ta2[ta]
 VP2 --> shu[shu]

```

(4.26) tā pǎo dào xuéxiào (Liang 1971:182)  
 he run to school  
 'He runs to school.'

- (p. 187)
- 
- ```
graph TD
    S1[S] --- NP1[NP]
    S1 --- VP1[VP]
    NP1 --- ta1[tā]
    VP1 --- V[V]
    VP1 --- N[N]
    VP1 --- EXT[EXT]
    V --- pao[pǎo]
    N --- empty[Ø]
    EXT --- DAO[DAO]
    EXT --- S2[S]
    DAO --- dao[dào]
    S2 --- ta2[tā]
    S2 --- shangqi[shàngqì]
    S2 --- bujiebu[bù jiē xià-qì]
```

The objects of the dào-phrase can be a time or place noun or a sentence (p. 183).

In first position, as a passive marker, *gěi* occurs in both "the so-called benefit and the harm sentences" (p. 188), in which its meaning 'to give' has been "completely lost" (p. 159).

When in second position, *gěi* indicates direction of the action of the other verb and "no longer has the lexical meaning of 'to give' but performs the function of marking out the indirect object to which the direction of the action of the verb...is focused" (p. 154). He lists (pp. 154-6) the types of verbs which must or may take *gěi* as a direction marker. For at least some sentences he states that *gěi* has "lost all of its verbal characteristics" (p. 157).

In his summary (pp. 188-9), Liang states that all three of the coverbs are finite verbs except preverbal *gěi*. However, in his description and analyses, only preverbal *dào* is a finite verb. Despite contradictory terminology, statements, and structures, it is possible to discover what his solutions would be: solution (2) - verbs in series, for *dào* when it occurs before another verb; and solution (1b) - embedded verb, for *zài* before another verb and all three coverbs when they occur after the other verb. The categorial status of preverbal *gěi* is not stated; its designation as a "passive marker" puts it outside the solutions suggested here.

In discussing the status of preposition in "classificatory grammars", Liang quotes from Lǐ Jīn-xì, *Guó-yǔ wén-fǎ* (A Grammar of Chinese), Shanghai, Commercial Press, 1965, p. 197, that a preposition is "a word which we use to introduce a noun or a pronoun to a verb or an adjective for the purpose of expressing various relations [of the verb or the adjective] such as time, place, means, and cause" (p. 30). This notion coincides closely with the notions of modern case grammar, but Liang says it is "much too broad and general to be an adequate criterion for classification" (p. 32).

4.3.7 CHARLES N. LI AND SANDRA A. THOMPSON

Li and Thompson (1973c:1) state, "The term 'co-verb' refers to a closed class of morphemes in Mandarin, most of which can be translated into English by means of prepositions... The co-verb typically introduces a noun." Since "many co-verbs are homophonous with verbs" (p. 10), there is "rather wide disagreement about whether [they] should be regarded as verbs or as prepositions" (p. 1), and they state that the use of the term "co-verb" "has enabled many teachers of Mandarin to avoid making a decision about whether to call these words verbs or prepositions in presenting them to students" (p. 2).

Li and Thompson (1973a:4; 1973b:15; 1973c:10-18) claim that coverbs are not verbs but case-marking prepositions which introduce "phrases

which could be labeled with such case names as Benefactive, Locative, Instrumental, etc." (1973a:4). In their 1973c paper, they give several arguments to support their analysis. The first argument compares coverb sentences with serial verb sentences, stating that, if coverbs were verbs, coverb sentences would express two separate actions, as is the case with serial verb sentences. Coverb sentences "always express one action modified by the co-verb phrase" (p. 14). For example, they state (p. 26, fn. 9) that the sentence

- (4.28) wǒ gei nǐ fānyī zhèi fēng xìn (Li & Thompson
 I for you translate this CL letter 1973c:26)
 'I'll translate this letter for you.'

"cannot reasonably be derived from the two strings

- wǒ gěi nǐ zhèi fēng xìn 'I give you this letter.'
 wǒ fānyī zhèi fēng xìn 'I translate this letter.'"

Further, the object of the first verb in serial verb sentences cannot "become the head noun of a relative clause" (p. 15), but the object of the preposition in the coverb sentence can, as shown in (4.30), where zài is the coverb. ((4.29) and (4.30) are both from Li & Thompson 1973c:16.)

- (4.29) wǒ zài nèi ge dìfang chī fàn
 I at that CL place eat rice
 'I eat at that place.'

- (4.30) wǒ zài nàr chī fàn de nèi ge dìfang...
 I at there eat rice Poss that CL place
 'That place that I eat at...'

Pointing out that some coverbs do not have homophonous verbs, they state (1973c:17-18) that there exists in the grammar of Mandarin the independent class "preposition" and that it is not economical to have to refer to a language-particular word class "coverb".

Finally, they state (1973c:18) that "there are sentence-final phrases containing what most analysts would call a preposition, which can be viewed as transformed variants of co-verb sentences." They give as example:

- (4.31) a) wǒ zhù zài Shànghǎi (Li & Thompson 1973c:18)
 I live at
 b) wǒ zài Shànghǎi zhù
 I at live
 'I live at Shanghai.'

Since (4.31) a) and b) are paraphrases, it seems reasonable to suppose that *zài* is a preposition in both sentences.

From the above statement, it appears that Li and Thompson do not recognise a distinction between preverbal and postverbal prepositional phrases. However, in their 1973b paper, they do give an example of a verb which allows the prepositional phrase to occur before it but not after it, as shown in (4.32) and (4.33).

- (4.32) Zhāng-sān *zài* chuáng shang *shuìjiào* (Li & Thompson
 at bed top sleep-sleep 1973b:3)
 'Zhang-san sleeps on the bed.'

- (4.33) * Zhāng-sān *shuìjiào* *zài* chuáng shang

They show that the verb *shuì* 'sleep' allows the *zài* prepositional phrase to follow, as in (4.34),

- (4.34) Zhāng-sān *shuì* *zài* chuáng shang (Li & Thompson
 sleep at bed top 1973b:2)
 'Zhang-san sleeps on the bed.'

and state that the only reason for the difference between the two verbs "appears to be the polysyllabicity of the verb *shuìjiào*" (p. 3). There is no discussion in any of the Li and Thompson papers regarding the types of cases that different verbs can take or regarding inner versus outer LOCATIVE and DATIVE versus BENEFACTIVE cases. In Sec. 4.1 above, it is stated that *zài* and *dào* occurring postverbally mark inner LOCATIVES only and occurring preverbally mark either inner or outer LOCATIVES, and that *gěi* occurring postverbally marks only DATIVE while preverbally it usually marks BENEFACTIVE. By this analysis, the verbs *zhù* 'live, reside' and *shuì* 'sleep' in (4.31) and (4.34) above are OBJECTIVE-LOCATIVE verbs which take inner LOCATIVES which can occur postverbally, while the verb *shuìjiào* 'sleep-sleep' in (4.32) and (4.33) appears unable to take an inner LOCATIVE and (4.32) might be translated '*On the bed Zhang-san is sleeping*'.

Although Li and Thompson agree with Liang that coverbs are historically derived from verbs and say that some of them are still homophonous with verbs which have similar meanings (1973c:3; also see discussion in Sec. 7.3.2 below), they definitely support solution (3) for all coverbs: Whether they occur preverbally or postverbally, they are synchronically case-marking prepositions, not verbs.

4.3.8 SUMMARY OF ANALYSES OF CHINESE COVERBS

In summary, there is general agreement that the postverbal coverbs are more closely related to the verb than the preverbal coverbs are.

In the descriptions just considered, this view is stated in terms of

1) constituency: Postverbal coverbs are elements under the VP while preverbal coverbs are elements of an embedded sentence attached to the higher S.

2) verb classes: Postverbal coverbs are restricted to certain verb classes while preverbal coverbs can occur with most verb classes.

Implicit in this view is the concept of inner and outer phrases. Li, Tang, and Teng discuss coverb phrases in terms of case relations, with Teng explicitly stating that inner Locative (postverbal locatives) sub-categorises verbs more strictly than outer Locative (preverbal locatives). Liang makes the distinction between preverbal locatives, which are the location of the action of the verb, and postverbal locatives, which are the direction or destination of the action of the verb. It is generally observed that postverbal *gěi* marks Dative (Indirect Object, Goal) while preverbal *gěi* marks Benefactive (or "harm" - cf. Gradin 1970a regarding Detrimental in Jeh), and that Dative is more restricted in the verbs with which it can occur.

A general summary, in terms of the solutions suggested in Sec. 4.2 above, is illustrated in the following table. Noted for each analysis are the preverbal and postverbal occurrences of coverbs.

Solutions:	Chao	Hashimoto	Li	Tang	Teng	Liang	Li & Thompson
1) Complex sentence with embedding							
a) Cvb: Higher V					Cvb V		
b) Cvb: Embedded V		zài V				V Cvb zài V	
2) Two Vs in series	(?)					dào V	
3) Cvb: P (case marker)	V Cvb? Cvb V?	V Cvb dào V gěi V	V Cvb Cvb V	V Cvb Cvb V	V Cvb		V Cvb Cvb V
Other "marker"						gěi V	

CHART IV-1 Comparison of Chinese Solutions for Coverbs

All but Tang and Liang recognise P as a base category. Tang considers the base element to be K (case) which is realised on the surface in Chinese by case markers (he never states how his "case marker" differs from a P); he considers prepositions to be a language-specific constituent. Liang suggests that P is not a valid category for Chinese and that coverbs are V in the base and on the surface.

CHAPTER V

COVERBS IN VIETNAMESE

5.0 THE COVERB PROBLEM RESTATED

As stated in Sec. 4.2 above, in Chinese linguistics, the term "coverb" has been used to describe all words which occur in a preposition-like use, whether or not there exists for a particular word a use as main verb. In this study, "coverb" will refer to words which occur in a prepositional function only when they also have a corresponding main-verb function. The term will not refer to the main-verb function.

As also stated above in Sec. 4.2, the coverb problem involves a determination of the syntactic role of coverbs - to determine the categorical nature of coverbs, the ways they function syntactically, and the relationship between coverbs and their corresponding verbs.

It was further stated that previous discussions about coverbs have mainly centered around this question:

Is a sentence containing a coverb

- 1) a complex sentence with embedding, i.e.
 - a) the coverb being the main, or higher, verb,
or
 - b) the coverb being an embedded verb;
- 2) a single matrix sentence containing a verb phrase series - that is, two verbs in series; or
- 3) a single-verb sentence containing a prepositional phrase in which the coverb is the preposition?

Solutions for Chinese were discussed. It was found that there was general but not total agreement that Chinese coverbs are prepositions or at least perform a preposition-like function. All but Liang (1971) and Tang (1972) recognise preposition as a basic category. Most analyses indicate a classification of verbs on the basis of their occurrence with

certain coverbs, and most analyses implicitly or explicitly note the distinction between inner and outer LOCATIVE and between DATIVE and BENEFACTIVE on the basis of verb case frames. (See Sec. 3.3.4 for discussion of inner and outer cases.)

This chapter will present the Vietnamese coverbs, giving solutions proposed in previous analyses, and then presenting the analysis proposed in this study and relating it to solutions previously proposed.

5.1 LOCATIVE VERBS AS CASE MARKERS

5.1.0 INTRODUCTION

It turns out that all the coverbs definitely identified for Vietnamese can occur as [+L] case markers except *cho* 'give to/for', which will be discussed in Sec. 5.4. (See Sec. 3.2.2.4 above for exposition of [+L] case markers.) The following sections will give these locative verbs and show their various uses.

5.1.1 VIETNAMESE LOCATIVE COVERBS

Following is the list of common Vietnamese verbs which can occur as coverbs and which are "locative" in one sense or another:

<u>ở</u>	<i>be in/at, reside in</i>
qua / sang	<i>go across (to), pass over/by</i>
lại	<i>come (back)</i>
về	<i>return (to)</i>
ra	<i>go out (to)</i>
vào / vào	<i>go in/into</i>
lên	<i>go up (to)</i>
xuống	<i>go down (to)</i>
đến / tới	<i>arrive at</i>

In many instances the members of the pairs *qua* and *sang*, *vào* and *vào*, and *đến* and *tới* are completely interchangeable. Situations where there is a preferable or obligatory choice are largely stylistic or dialectal rather than grammatical and will not be considered pertinent factors in the grammatical analysis of coverbs.

The following examples are sentences which show the above verbs either as main verbs (marked beneath as V) or as coverbs (marked as Cvb). All occurrences, whether as verbs or coverbs, are underlined.

ở

- (5.1) *tôi sẽ ở đó đến cuối năm*
 I Fut *be in there* arrive end year
 V Cvb

'I'll be there until the end of the year.'

- (5.2) họ mới dọn nhà, không ở nhà cũ nữa
 they just arrange house not be in house old more
 V

'They just moved, they're not at the old house any more.'

- (5.3) nếu chị ăn Tết ở Huế thì tôi sẽ ra Huế
 if elder eat festival be in then I Fut go out
 sister Cvb V

'If you, sister, celebrate the New Year in Hue, I'll come to Hue.'

- (5.4) đầu tháng 11 cô Mai sẽ dạy ở trường Gia-Long
 head month Miss Fut teach be in school
 Cvb

'At the beginning of November Miss Mai is going to teach at Gia-Long school.'

- (5.5) ở bên Mỹ chắc có nhiều đồ đẹp lắm
 be in side America sure have many thing pretty very
 Cvb

'In America there must be many very pretty things.'

qua

- (5.6) bao-giờ cô qua cô Lan chơi
 when Miss cross Miss play
 V

'When are you going over to Miss Lan's to visit?'

- (5.7) chiếc thuyền qua sông rồi
 Cl sampan cross river already
 V

'The boat has crossed the river already.'

- (5.8) cô lái đò chèo thuyền qua sông
 Miss steer ferry oar sampan cross river
 Cvb

'The barge girl is oaring the boat across the river.'

- (5.9) ông Phong gửi dụng-cụ qua Lào
 Sir send tool cross
 Cvb

'Mr Phong sent the tools to Laos.'

sang

- (5.10) có anh sang đây thì vui lắm
 have elder cross here then joyful very
 brother V

'If you come here (a great distance), it will be lots of fun.'

- (5.11) mùa thu sắp tới anh-ấy sang Mỹ học
 season fall about arrive he cross America study
 to V V
'He's going to America to study this coming fall.'
- (5.12) con nhận quà Tết má gửi sang Mỹ cho con
 child receive gift New mother send cross America give child
 Year Cvb
'I received the New Year's gift you sent to America for me, Mother.'

lại

- (5.13) anh lại đây chơi nhé
 elder come here play O.K.
 brother V
'Come on over here and talk to me, O.K.?'

Lại does not seem to be as common as the other coverbs, either as a verb or as a coverb, although it occurs profusely in immediate association with other verbs to modify them. (Cf. examples of these verbs as adverbs in Sec. 5.1.3, especially sentence (5.47).)

- (5.14) chị cứ cho người đưa giấy lại nhà tôi
 elder con- give person take paper come house I
 sister tinue Cvb
'Go ahead and give that man the paper to bring to my house.'
- (5.15) mang ghế lại đây (Le 1960:258)
 carry chair come here
 Cvb
'Bring the chair here.'

về

- (5.16) tôi sẽ về Sài Gòn ăn Tết vào khoảng 30 Tết
 I Fut return eat New go in interval
 V Year Cvb
'I'll return to Saigon to celebrate the New Year about the 30th.'
- (5.17) bao-giờ chị về Mỹ-Tho, qua thăm em nhé
 when elder return cross visit young O.K.
 sis V V sib
'When you return to My-Tho, come over and see me, O.K.?'
- (5.18) tôi vừa đi thăm các đảo Hạ-Uy-Di về
 I just go visit Pl island return
 V
'I've just returned from visiting the other islands of Hawai'i.'

- (5.19) tôi sẽ gửi một vật kỷ-niệm về Sài Gòn
 I Fut send one Cl souvenir return
 Cvb

'I'm going to send a souvenir back to Saigon.'

- (5.20) tôi có gửi về chị một bưu-ảnh
 I have send return elder one postcard
 Cvb sis

'I sent you a postcard already.'

ra

- (5.21) cô Kim sẽ ra Huế ba bốn ngày
 Miss Fut go out three four day
 V

'Miss Kim will go to Hue for three or four days.'

- (5.22) em ra đi, mang theo nhiều kỷ-niệm vui
 young go out go carry follow much souvenir happy
 sib V

'When I went away I carried with me many happy memories.'

- (5.23) ông Phong có gửi thư ra Huế
 Sir have send letter go out
 Cvb

'Mr Phong sent a letter to Hue already.'

- (5.24) tôi ngồi trên xe nhìn ra hai hàng thông bên bờ
 I sit top vehicle look at go out two row pine side border
 Cvb

'I sat in the bus and looked out at the two rows of pine trees along the side of the road.'

vô/vào

- (5.25) Lan vô phòng học rồi
 go in room study already
 V

'Lan went into the classroom already.'

- (5.26) chị May vào Mỹ-Tho tuần rồi
 elder go in week already
 sis V

'Elder Sister May went to My-Tho last week.'

- (5.27) ông thư-ký thọc tay vào túi áo (Nguyen D-H
 clerk thrust hand go in pocket jacket 1973:16)
 Cvb

'The clerk stuck his hand into his coat pocket.'

- (5.28) tôi sẽ trở-quả Bangkok vào giữa tháng 3
 I Fut return go in middle month
 over to Cvb
 'I'll return to Bangkok in the middle of March.'

lên

- (5.29) Lan lên Đà Lạt nghỉ vài ngày
 go up rest a few day
 V
 'Lan went to Dalat to rest for a few days.'

- (5.30) ông-ấy đem sách lên Sài Gòn (Liem 1973a:11)
 he bring book go up
 Cvb
 'He brought books up to Saigon.'

xuống

- (5.31) cho tôi xuống đây nhé
 give I go down here O.K.?
 V
 'Please let me off (the bus) here.'

- (5.32) nhiệt-độ thay-đổi từ 70° xuống 33°
 temperature change from go down
 Cvb
 'The temperature changed from 70° down to 33°.'

đến

- (5.33) Xuân đến nhà bác hai giờ rồi
 arrive house uncle two hour already
 V
 'Xuan arrived at her uncle's house two hours ago.'

- (5.34) tôi đi bằng xe-buýt ghé St. Louis Chicago rồi đến Нью-Йорк
 I go by bus stop by finish arrive
 V
 'I went by bus, stopped by St. Louis and Chicago, and finally arrived in New York.'

- (5.35) tôi đến thăm thi-sĩ Xuân và hai chúng tôi nhắc đến cô luôn
 arrive visit poet and two Pl I recall arrive Miss often
 V Cvb
 'I went to see poet Xuan and the two of us spoke of you often.'

- (5.36) họ dọn nhà đến số 3 đường Gia-Long
 they arrange house arrive number street
 Cvb
 'They moved to No. 3 Gia-Long Street.'

- (5.37) tôi đã làm việc từ 9 giờ đến trưa
 I Past do work from hour arrive noon
 Cvb
 'I worked from 9 o'clock until noon.'

5.1.2 OTHER POTENTIAL LOCATIVE COVERBS

The list above is undoubtedly not complete. There are other words which are potential or may be actual coverbs. Two of these are đi 'go' and theo 'follow'.

Đi is a regularly occurring OBJECTIVE-LOCATIVE (O-L) verb of direction. It is listed in Sec. 3.3.5.4 above as being a member of the group of O-L-Goal verbs which can take their LOCATIVES in the AC case form, as in in (5.38),

- (5.38) chị Lan đi Sài Gòn
 elder sis go
 [+NM] [+AC]
 [+OBJ] [+LOC]

'Elder Sister Lan went to Saigon.'

or in the L case form, as in (5.39).

- (5.39) chị Lan đi vào Sài Gòn
 go in
 [+NM] [+L] [+AC]
 [+OBJ] [+gol] [+LOC]

'Elder Sister Lan went to Saigon (from north of Saigon).'

Đi can occur as a coverb - a [+L,+gol] case marker - with certain AGENTIVE-LOCATIVE verbs of direction, as in (5.40).

- (5.40) ông Phong gửi dụng-cụ đi Lào (N. D. Liem)
 Sir send tool go
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]

'Mr Phong sent the tools to Laos.'

However, đi cannot occur as a coverb with O-L verbs, i.e. (5.41) and (5.42) are ungrammatical.

- (5.41) * Lan chạy đi vườn
 run go garden
 [+NM] [+L] [+AC]
 [+OBJ] [+gol] [+LOC]

'Lan ran to the garden.'

(Lan chạy vào vườn 'Lan ran into the garden' is grammatical.)

- (5.42) * Lan về đi nhà
 return go house
 [+NM] [+L] [+AC]
 [+OBJ] [+gol] [+LOC]

'Lan returned home.'

(Lan về nhà 'Lan returned home', and Lan đi về nhà 'Lan went home', with đi as verb with the coverb về, are both grammatical.)

In Chapter VII below, coverbs are discussed as being part of a historical process involving verbs and prepositions. It is believed that đi is involved in this process and is not, at the present stage of the language, a full coverb. For this reason, đi is not included in the above list of coverbs.

It is uncertain whether the verb theo 'follow' can be considered a locative verb. It appears to require an OBJECTIVE that is capable of locomotion, as in (5.43).

- (5.43) cô-áý theo chồng / xe
 she follow husband vehicle
 'She followed her husband / the car.'

It can occur with a locative noun such as đường 'road' only in a metaphorical sense; that is, (5.44) is grammatical but (5.45) is not.

- (5.44) nó theo đường cộng-sản
 he follow road communism
 'He follows the Communist way.'

- (5.45) * nó theo đường Lê-Lợi
 'He followed Le-Loi Street.'

The problems of abstract LOCATIVES are beyond the scope of this study. Theo can occur as a coverb meaning 'following, according to', as in (5.46).

- (5.46) tôi làm theo lời ông nói (Cadière 1958:132)
 I do follow word Sir speak
 'I'll do (it) according to what you say.'

The case relation of lời in (5.46) is open to question; perhaps it is INSTRUMENTAL or MANNER. It is unknown what case form theo marks. (Cf. Khmer taam 'follow' as a [+L] coverb with INSTRUMENTAL.) Much more investigation is needed before the status of theo as coverb can be determined.

5.1.3 ADVERBIAL USES

All the words of direction in the above list and the direction word *đi* can also occur following main verbs to modify the main verbs in a way consistent with the semantic features on the direction word. Following are some examples, with the direction word underlined.

- (5.47) *tiếc quá vì không gặp lại cô trước khi ra đi*
sorry very because not meet come Miss before time go out go
back

'I'm very sorry because I didn't see you AGAIN before I went AWAY.'

- (5.48) *chúng ta mau lên, kéo bị chết* (Thompson 1965a:232)
1pPl Incl be go up lest suffer die
fast

'We'd better hurry UP, or else we'll be dead!'

- (5.49) *mời anh ghé vào chơi khi đó*
invite elder stop by go in play time that
bro

'At that time please stop IN to visit.'

Such words can precede or follow an OBJECTIVE, as in (5.50) and (5.51).

- (5.50) *đem rượu ra* (Nguyen D-H 1972:406)
carry wine go out
'Bring the wine OUT!'

- (5.51) *đem ra ba chai rượu*
3 bottle
'Bring OUT three bottles of wine.'

In this function, these words serve only to modify the main verb and can, in most instances, be omitted. They do not form a construction with a following NP. Furthermore, they can occur with a preposition which does occur in construction with a following NP, as in (5.52),

- (5.52) *chị Hai nhỏ cây (ra) khỏi đất*
elder two pull up plant go out out of earth
sis

[+NM]
[+AGT]

[+AC]
[+OBJ]

[+L]
[+src]

[+AC]
[+LOC]

'Second Sister is pulling the plants out of the ground.'

in which *ra* is optional. For these reasons, I do not consider these words in this function to be verbs or coverbs, but adverbs ([+Adv]). One difference between the use as coverb and the use as Adverb can be shown by a simple change of word order. In (5.53), *lại* 'come', with

constituent NP họ, is a coverb. In (5.54), lại is an adverb meaning 'hither'. (Both examples are from Jones and Thong 1960:160.)

- (5.53) chừng nào ông đem lại họ
degree which Sir carry come they
 [+AC] [+NM] [+L] [+AC]
 [+TIM] [+AGT] [+gol] [+DAT]
 'When are you going to take (it) TO them?'

- (5.54) chừng nào ông đem họ lại
 [+AC] [+NM] [+AC] [+Adv]
 [+TIM] [+AGT] [+OBJ]
 'When are you going to bring them OVER HERE?'

It may turn out that these adverbs play a role in cooccurrence restrictions with certain verbs, particularly AGENTIVE-LOCATIVE verbs. It may be that some A-L verbs of direction require either a directional LOCATIVE or a directional Adverb. Certainly, further investigation should reveal the derivational relationship between these V-P-Adv functions. However, such investigation will not be undertaken in this study and no further analysis will be made other than to note the presence of these adverbs when they occur in sentences.

5.2 PREVIOUS SOLUTIONS FOR VIETNAMESE

5.2.0 INTRODUCTION

Little has been written specifically about coverbs in Vietnamese, but they are dealt with in some grammars and in a number of analyses of related phenomena. In the following sections are given summaries of analyses of Vietnamese coverbs by Laurence C. Thompson, Nguyen Dinh-Hoa, Nguyen-Dang Liem, Donna Ha, and Tran Trong Hai.

5.2.1 LAURENCE C. THOMPSON

Thompson, in *A Vietnamese Grammar* (1965a), calls occurrences of coverbs sequential phrases, about which he says, "...a number of high-frequency verbs appear with rather specialized meanings as second head in sequential phrases" (p. 231). By this, it seems that he considers such second verbs still to be verbs but with slight shifts in meaning from their use as main verbs. Following are some of his examples (from pp. 232-4), with the coverb underlined.

- (5.55) việc này thuộc về ông Lâm
work this concern return Sir
 'This matter concerns Mr Lam (intimately).'

(5.56) việc này thuộc đến ông Lâm
arrive at
'This matter concerns Mr Lam (superficially).'

(5.57) anh ấy làm đến hai giờ rưỡi
elder that do arrive at two hour half
bro
'He worked up to two-thirty.'

(5.58) họ vẽ cành đào vào tờ giấy bùa
they draw branch peach go in sheet paper temple
'They draw a peach branch on a (paper) amulet.'

It appears that Thompson's solution fits solution 2 above: a coverb is the second verb in a verb series.

5.2.2 NGUYỄN ĐÌNH-HÒA

In his paper 'Vietnamese categories of result, direction, and orientation' (1972), Nguyen discusses coverbs as being the second verb in a verb series. Categories of direction are "manifested by means of co-verbs appearing after main verbs" (p. 395); there are verb sequences which "contain units which have been translated by such prepositions as *to*, *toward*, *into*" (p. 396). A good many of his examples and much of his discussion concern these "units" as postverbal directionals without following locative phrases, as in (5.59) and (5.60), with the "co-verb" underlined. (These are what I have called, in Sec. 5.1.3 above, direction adverbs, which modify the direction of the main verb.)

(5.59) kiễng chân lên (Nguyen 1972:396)
stand on tiptoe foot up
'On your toes!'

(5.60) đem rượu ra (Nguyen 1972:406)
carry wine out
'Bring (out) the wine!'

He lists and describes each of the following "co-verbs of direction", which "all have a movement or a motion as core meaning" (p. 403).

đi go; away, off, forth
đến/tới arrive, reach; toward (with destination)

He states that *đi* and *đến/tới* express movement of the subject *vis-à-vis* a given location; the rest of the coverbs express direction of a movement in space (p. 403).

ra exit; out
vào enter; in

lên	<i>ascend; up</i>
xuống	<i>descend; down</i>
sang/quá	<i>go/come over, cross (over to); across</i>
về	<i>go/come back, return; back to</i>
lại	<i>come, return; back</i>
dậy	<i>rise; up, upward</i>

Đậy never takes an object since "its basic meaning is that of an intransitive verb...although the movement is upward there is no change of place" (p. 408). His examples of đi show two uses: in (5.61) đi is used as what I have called adverb:

- (5.61) vứt đi (Nguyen 1972:404)
discard away
'throw away'

In (5.62) đi occurs as a coverb with what I have analysed as an AGENTIVE-DATIVE/LOCATIVE verb, gửi 'send' (see discussion of đi in Sec. 5.1.2 above).

- (5.62) ...gửi đi Nha-Trang (Nguyen 1972:404)
send to
'sent (it) to Nha-Trang'

Nguyen (1972:404) states that the main verb of a sentence with a coverb is "one of directional action which denotes a motion, gesture, behavioral act or process". He lists a number of verbs according to their possible cooccurrence with specific coverbs, stating that some verbs are restricted with regard to possible direction. A study of his list reveals that those verbs which are so restricted occur only with "co-verbs" functioning as adverbs. Following are those verbs from his list which can generally occur with any of the coverbs:

bò	<i>crawl</i>
bay	<i>fly</i>
bơi	<i>swim</i>
chạy	<i>run</i>
mang	<i>bring</i>
đem	<i>bring</i>
đưa	<i>hand</i>
khiêng	<i>carry</i>
tung	<i>throw</i>

Tung (an AGENTIVE-LOCATIVE verb, according to my analysis) does not occur with đi 'away' or lại 'back'.

Nguyen discusses cho 'give' as a coverb occurring with the indirect object of a main verb of giving or distributing. He lists examples of verbs of giving, but his example sentences with cho as a coverb are

with "beneficiary" nouns (my BENEFACTIVE, not my DATIVE) with verbs which do not take indirect objects, as in (5.63).

- (5.63) *tôi vẽ hai bức tranh cho anh* (Nguyen 1972:411)
I paint two CL picture for elder brother
'I'll do two paintings for you.'

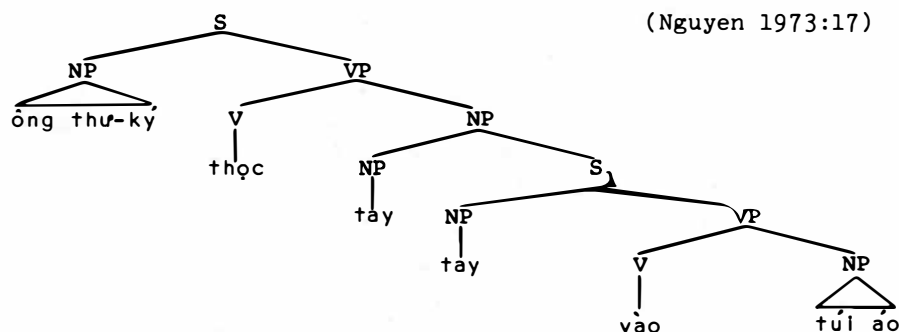
In his 1973 discussion on the various classes of ditransitive verbs (Nguyen 1973), Nguyen also discusses *cho* with Verbs of Giving. Perhaps the best way to elucidate his analysis of coverbs in this paper would be to give the relevant points from the section on Verbs of Inserting.

He says (1973:16f), "There are several verbs in Vietnamese that accompany two NP's, one of which expresses location in a rather special way." The NP which expresses location in his example is one which is preceded by a verb which "has often been called a coverb of direction in the surface structure." He gives sentence (5.64).

- (5.64) *ông thư-ký thọc tay vào túi áo* (Nguyen 1973:17)
grand-secretary thrust hand enter pocket jacket
father
'The clerk stuck his hand into his coat pocket.'

This sentence, in his analysis, is a "telescoped construction" because the noun *tay* 'hand' is both the object of the main verb *thọc* 'thrust' and the subject of the embedded verb *vào* 'enter'.

He gives two alternative deep structures for (5.64), the first being:

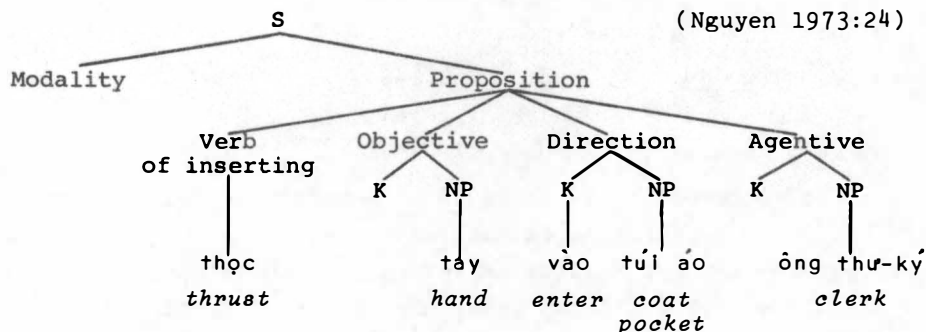


Presumably, a transformation or convention deletes the second *tay* under identity conditions.

This analysis of (5.64) shows the phrase *vào túi áo* as syntactically a relative clause, and we might expect a sentence with such a structure to be glossed as '*the clerk thrust the hand which entered his coat pocket*'. This fails to show the relationship between the NP *túi áo* 'coat pocket' and the verb *thọc* 'thrust'; that is, the verb *thọc* has a direct object '*the hand which entered the pocket*', but no sister

constituent expressing the goal of the thrusting. Vào is the main verb of a relative clause, a solution which does not fit any of the solutions suggested in Sec. 5.0.

Nguyen's alternative deep structure for (5.64) is a Fillmorean representation, indicating the case relation of each NP with the main verb of the Proposition by a case node, and representing vào as K - the case marker for an NP of Direction:



Thus, this alternative complies with solution (3): Sentence (5.64) is a single-verb sentence containing a case phrase - or preposition phrase - in which the coverb is a K - or preposition.

This last analysis, more clearly than the first analysis, states the relationship between the verb *thọc* and the NP *túi áo*. That is, it states clearly that the act of thrusting is directed toward the pocket, which is not true of the first analysis. Furthermore, it more truly characterises the ditransitivity of *thọc* and the types of sentences in which *thọc* can occur. Nguyen gives *thọc* as a Verb of Inserting, and, as stated earlier here, says that this class of verbs has a "special location" NP as one of its NPs. In fact, his class of Verbs of Inserting clearly belongs in my class of AGENTIVE-LOCATIVE-Goal verbs (Sec. 3.3.5.2.1 above), which are verbs which, in addition to their OBJECTIVE nouns, have optional or obligatory LOCATIVE nouns in their case frames. *Thọc* is one of the AGENTIVE-LOCATIVE verbs which has an obligatory LOCATIVE (see discussion in Sec. 5.3.1 below).

5.2.3 NGUYỄN ĐĂNG LIÊM

Although Liem does not give a structural analysis of coverbs as such, we can deduce from his statements which of the three solutions presented above are applicable.

In his *Vietnamese Grammar* (1969:153-4), coverbs are termed Defective Verbs (i.e. the second - not the main - verb of a sentence). When a locative Defective Verb occurs in an Active Intransitive sentence, it is

attached to the Predicate, which includes an Intransitive Verb stem plus the Defective Verb; the Predicate is followed by an L Relator Axis Phrase of Direction. He gives the following examples. I have inserted slash marks to indicate phrase boundaries according to Liem.

- (5.65) nó / đi vô / trong nhà (Liem 1969:154)
 he go enter in house
 Sbj / IntrV DefvV / Loc DirPhr
 Prep N Head
'He went into the house.'
- nó / đi xuống / dưới nhà bếp
 descend under kitchen
'He went down to the kitchen.'

When a locative Defective Verb occurs with a "Single Transitive" verb, instead of being attached to the Predicate, it is the initial and obligatory element of an L Relator Axis Phrase of Location (pp. 154-5). The only Defective Verb which can occur here is the Defective Verb ở, as in (5.66).

- (5.66) nó / bán / quần áo / ở ngoài chợ
 he sell pants dress stay outside market
 Sbj SgTrV DirObj DefvV LPrep NHd
'He sells clothes in the market.' (Liem 1969:155)

A verb such as gửi 'send' is a Double Transitive Verb when the Indirect Object immediately follows it and there is no Defective Verb, as in (5.67).

- (5.67) nó / gửi / tôi / hai bức thư (Liem 1969:100)
 he send I two letter
 Sbj DbTrV IndirObj DirObj
'He sent me two letters.'

(5.67) can be transformed into (5.68), in which the verb gửi becomes a Single Transitive Verb with an Indirect Object Relator Axis Phrase which has the Defective Verb cho.

- (5.68) nó / gửi / hai bức thư / cho tôi
 he send two letter give I
 Sbj SgTrV DirObj DefvV NHd
 IO
'He sent two letters to me.' (Liem 1969:101)

(5.68) can in turn be transformed into (5.69), with an L Relator Axis Phrase and the Defective Verb về.

- (5.69) nỏ / gỏi / hai bức thư / về tôi
 he send two letter return I
 Sbj SgTrV DirObj DefvV NHd
- L

'He sent two letters to me.'

(Liem 1969:101)

Liem does not say why a Double Transitive Verb becomes a Single Transitive Verb when it takes a Defective Verb as Direction or Indirect Object marker, but we can deduce that it is because he considers the presence of a Defective Verb to signal a verb series; that is, the noun head of a Locative or Indirect Object phrase is the Object of the Defective Verb so that we have $V^{NP}V^{NP}$, with the first verb being the main verb of the sentence and the second verb being a secondary verb. This appears to be his analysis of (5.66), (5.68), and (5.69). In (5.65) we have $VV^{P}NP$. (For a full discussion of what Liem calls Location Prepositions and what I call relator nouns, see Sec. 3.2.3 above.) It thus appears that Liem's 1969 solution is solution (2): a single matrix sentence containing two verbs in series.

Although in 1969, Liem calls coverbs "Defective Verbs", his analysis states them to be markers of location, direction, or indirect object on following relator axis phrases. This satisfies the definition of P as a case marker on following nouns and paves the way for his 1973 statement that coverbs are Ps. In his 1973 description of case in Vietnamese, he does not single out coverbs for discussion but includes them in his list of case-marking prepositions (Liem 1973a:3-4). His examples of locative coverbs in sentences (p. 11) include one with an intransitive verb of direction and a LOCATIVE of direction, (5.70), one with a transitive verb and a LOCATIVE of direction, (5.71), and one with a transitive verb and a LOCATIVE of location, (5.72). The case markings are Liem's, but the terms "LOCATIVE of direction" and "LOCATIVE of location" are mine.

- (5.70) ông ấy đi lên Sài Gòn
he go up to
[+NM] [+Di]
[+OBJ] [+DIR]

'He went up to Saigon.'

- (5.71) ông ấy đem sách lên Sàigòn
 he bring book up to
 [+NM] [+O] [+Di]
 [+AGT] [+OBJ] [+DIR]

'He brought books up to Saigon.'

- (5.72) ông ấy mua sách ở Mỹ
 he buy book in America
 [+NM] [+O] [+L]
 [+AGT] [+OBJ] [+LOC]
 'He bought books in America.'

Thus, Liem's 1973 analysis complies with solution (3): coverbs are prepositions.

5.2.4 DONNA HA

Ha's case analysis of Vietnamese (1970:28) lists eight common direction verbs, including đi 'go' and excluding lại 'come (back)' (which I have included in my list of direction verbs-coverbs). She proposes that when any of these verbs, except đi, occurs following đi, it is a preposition marking the Direction case, and that such verbs are marked in the lexicon with the feature 'co-prep' (p. 30). She sets up a rule that states this fact by operating on that feature to create a homophonous preposition. Her rule is given here, along with her lexical entry for qua and two sample sentences.

- (5.73) tôi qua Mỹ (Ha 1970:30)
 I go across America
 tôi đi qua Mỹ
 I go cross over America

Both sentences: *'I am going over to America.'*



She points out the fact that the location verb ở also occurs as a preposition, though marking the Locative rather than the Direction case. She states that "the verb ở is the only verb which takes an explicitly obligatory L case when used as a main verb" (p. 34). (Note that her "L", following Fillmore, is a case relation, not a case form.) She does not make clear whether she means by this that ở is the only verb marking L or that ở always requires an L case NP following while direction verbs do not have obligatory D case NPs. All her examples of direction verbs and her formulation of a direction verb sentence suggest that direction verbs also have obligatory NPs.

Since her co-prep rule applies only to verbs of direction, she finds it necessary to posit two lexical entries for ở:

$$\begin{array}{c} \sigma \\ \left[\begin{array}{l} +V \\ +[A \text{ } __ L] \\ . \\ . \\ . \end{array} \right] \end{array}$$

where the verb $\dot{\sigma}$ has A for Actor subject, and the preposition $\dot{\sigma}$ is prevented from cooccurring with a preceding verb of direction and preceding $\dot{\sigma}$ verb.

It is seen that Ha's solution for coverbs is solution (3): coverbs are prepositions marking case relations. Certain of them are derived from verbs.

5.2.5 TRẦN TRÔNG HẢI

Tran's analysis (1972) is solution (3) above; that is, he considers a coverb to be a preposition that serves as a case marker in a prepositional phrase. Tran, like Ha, considers coverbs to be prepositions derived from verbs, but he also includes the location verb *ở*. He, too, posits a rule feature, [+cvb], for the lexical entries of these verbs, and a coverb derivational rule. The form of the rule is as follows:

$$\begin{array}{c} \left[\begin{array}{l} +V \\ +cvb \\ \left\{ \begin{array}{l} +dat \\ +loc \\ +dir \\ +goal \\ +source \end{array} \right\} \\ 1 \end{array} \right]_1 \\ \alpha F_i \end{array} \quad \rightarrow \quad \begin{array}{c} \left[\begin{array}{l} +P \\ +DERV \\ \left\{ \begin{array}{l} +D \\ +L \\ +Di \\ +GL \\ +SR \end{array} \right\} \\ 1 \end{array} \right]_1 \\ \alpha F_i \end{array} \quad (\text{Tran 1972:8})$$

What this rule says is that a [+cvb] verb which has a certain subcase feature can serve as a model for a preposition with the case form corresponding to the subcase feature, and carry over any other semantic features, αF_i . For example, if a verb is marked [+cvb,+dir, αF_i], there is a corresponding preposition marked [+DERV,+Di, αF_i].

In this paper, Tran also discusses coverbs in Thai, Lao, and Chinese (although he fails to note the distinction in Chinese discussed in Sec. 4.1 above between coverbs that occur before the verb and those that occur after), and the derivationalal rule above is posited as universal.

Like Ha's rule, this is a rule which operates on an *ad hoc* rule feature and does not identify any characteristic syntactic or semantic property of these particular verbs that allows them to serve as

prepositions. The following section proposes an analysis of coverbs that attempts to overcome this weakness.

5.3 ANALYSIS PROPOSED IN THIS STUDY

5.3.0 INTRODUCTION

My solution for the coverb problem is solution (3): Coverbs are case-marking prepositions. In the following sections, I will attempt to justify this solution with regard to the locative coverbs listed above in Sec. 5.1.1, giving reasons for their classification as prepositions and demonstrating the relationship between the verbal and prepositional functions of these locative words.

5.3.1 LOCATIVE COVERBS AS PREPOSITIONS

Within the framework of the lexicase model and following Ha and Tran, I will treat coverbs as prepositions derived from verbs. Because, in any given sentence, a word functions as either a V or a P, and because Vs and Ps are subject to category-particular syntactic rules, I consider the preposition and the verb to be two separate lexical items, related by a derivational rule. That is, the coverb ở (which should be glossed 'in, at' instead of the verbal gloss 'be in/at' given in Sec. 5.1.1) is a preposition which is lexically separate but derivationally related to the verb ở 'be in/at'. The distinctions between Vs and Ps and the derivational relationship between the coverbs and their corresponding verbs is discussed fully in Sec. 5.3.3 below.

There already exists in Vietnamese a category P, a class of prepositions which have no corresponding verb function. Such Ps as tại 'in', từ 'from', and với 'with' can never occur as the main verb in a sentence. It is not necessary, therefore, to postulate a new category in Vietnamese in order to classify the coverbs as Ps; whereas, to posit a distinct category of "Coverb" or "Defective Verb" is not only unnecessary and uneconomical, but it suggests that these words are a class of verbs. It can be shown in several ways that a word performing a "prepositional function" cannot be a verb.

In the first place, verbs in series implies two actions or states, whether they are simultaneous actions or sequential actions as consecutive action, purpose, or resultative. The sentence, with the word vào,

(5.74) Lan chạy vào vườn
 run (go) into garden
 'Lan ran into the garden.'

could be considered to have serial verbs and to mean 'Lan ran and entered

the garden'. However, (5.74) is not conceptualised by native speakers as having sequential actions. Vào could still be considered to be a verb if (5.74) is interpreted as simultaneous action: *'Lan ran, entering the garden'*. However,

- (5.75) Lan nhìn vào cửa-sổ
 look window
 'Lan looked into the window.'

cannot be interpreted as *'Lan looked, entering the window'*. Vào in (5.75) cannot be a verb. To say that vào in (5.74) is a verb and vào in (5.75) is something other than a verb is to make an inconsistent and *ac hoc* statement about the grammar of Vietnamese, since the two vàos are grammatically identical. It might be claimed that vào in both (5.74) and (5.75) is a verb functioning as an adverb modifying the direction of chạy and nhìn. However, if this were the case, the presence of vào should be optional, and it is not; Lan chạy vườn and Lan nhìn cửa-sổ are ungrammatical.

Again, (5.76) might be considered to have two separate actions;

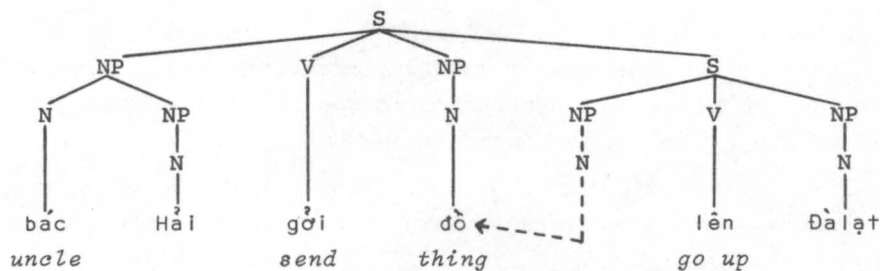
- (5.76) bác Hải mang đồ lên Đà Lạt
 uncle carry thing (go) up to
 'Old Hai took the things up to Dalat.'
 'Old Hai carried the things and went up to Dalat.'

but (5.77) does not mean *'Old Hai sent the things and went up to Dalat.'*

- (5.77) bác Hải gửi đồ lên Đà Lạt
 uncle send thing (go) up to
 'Old Hai sent the things to Dalat.'

If lên in (5.77) is claimed to be a subordinate verb, it could only be in an "Object-controlled" verb complement (see Kullavanijaya 1974 on the structure of verb complements), and the following structure could be posited for (5.77),

5.78



in which the "Missing Complement Subject" (Kullavanijaya 1974:250-6) of the embedded verb lên is coreferential with the object of the higher

verb *gởi*. Such a structure is necessary for causative, purposive, or resultative complements (as, e.g. in má *cho* chị Hai *nấu* cơm 'Mother LET Second Sister COOK the rice').

However, if we use the same structure to explain (5.79), *từ* 'from' would also have to be shown as an underlying verb although it never occurs as a verb on the surface.

- (5.79) *bác Hải gửi bức thư từ Đà Lạt*
uncle send letter from
'Old Hai sent a letter from Dalat.'
 [Old Hai sent a letter [* a letter WENT FROM Dalat]]

Although *lên* has a corresponding verb function and *từ* does not, *lên* and *từ* are grammatically identical in (5.77) and (5.79). It would be circular and unnecessarily abstract to say that *lên* is a verb, not a P, because it has a corresponding verb function, and then have to treat *từ* and other underived Ps as verbs because they behave like the coverbs.

Furthermore, positing complex sentences with underlying verbs for coverb sentences is unnecessary because coverb sentences fit into surface structure patterns established independently on the basis of Ps which have no corresponding verb function. There exists a framework to explain coverbs and coverb sentences in a way that is consistent with these surface structure patterns and with the requirements of the verbs with which coverbs occur. This framework, which is demonstrated for Vietnamese in Chapter III above, states that a verb has a particular case frame which shows the case relations with which a verb may or must occur and the allowable case forms for these case relations. Prepositions, as defined and discussed in Secs. 3.1 and 3.2.2.0 above, - and the coverbs - are case markers which mark the case form of the case relation and therefore function in satisfying the requirements of verbs. If coverbs were verbs, there would be no way of economically stating such case frames without marking these verbs with case forms, a change in the theory which is unmotivated on any other grounds and which would make such verbs subject to two different sets of syntactic rules.

To illustrate the function of coverbs in satisfying the requirements of verbs, we can recall the discussion in Sec. 5.2.2 of Nguyen Dinh-Hoa's analysis of the following sentence.

- (5.80) *ông thư-ký thọc tay vào túi áo*
grand-secretary thrust hand enter pocket jacket
father
'The clerk stuck his hand into his coat pocket.'

(Nguyen D-H 1973:16)

In the discussion, it was stated that the verb *thọc* has an obligatory LOCATIVE. We can say that *thọc* has the following case frame,

thoc 'thrust'

$$\left[\begin{array}{l} +[+NM, +AGT] \text{---} \\ + \text{---} [+AC, +OBJ] \\ + \text{---} \left\{ \begin{array}{l} +L \\ +AC, +rel \end{array} \right\}, +LOC \end{array} \right],$$

stating that it has an obligatory OBJECTIVE and an obligatory LOCATIVE and that the LOCATIVE must occur in the L case form or the AC case form with a locative relator noun. That is, (5.81) is ungrammatical.

(5.81) * ông thư-ký thọc tay túi áo
clerk thrust hand pocket

Thus, the coverb *vào* plays a vital role in (5.80) in satisfying the requirements of the verb *thọc*. If *vào* were a verb in (5.80), there would be no uniform and economical way of stating this role in the case frame of *thọc*.

As Ps, the locative coverbs of course play a role in subcategorisation of verbs. For example, OBJECTIVE-LOCATIVE-Goal verbs can be subcategorised according to whether they may not occur with [+L] Ps, must occur with [+L] Ps or relator nouns, or have free choice.

Finally, some of the locative coverbs can occur with OBJECTIVE and TIME phrases, where it is very difficult to consider them verbs, as, for example, in (5.82) and (5.83). ((5.82) is ungrammatical without the coverb.)

(5.82) tôi nghĩ đến cô-ấy nhiều
 I think to she much
 (reaching)

$\begin{bmatrix} +NM \\ +DAT \end{bmatrix}$	$\begin{bmatrix} +AC \\ +OBJ \end{bmatrix}$
---	---

'I think of her a lot.'

(5.83) Lan đi vào tháng năm
go in month five
'Lan is going in May.'

If vào in (5.83) is a verb, it has no subject unless we wish to say that Lan is going into the fifth month. Likewise, in (5.84), đến ba giờ chiều is a relationship of time with the verb làm 'do'; đến is not a complement verb whose subject is the noun việc 'work' or a secondary verb whose subject is the noun Xuân.

(5.84) Xuân làm việc đến ba giờ chiều
do work to three hour evening
'Xuan worked until three o'clock in the afternoon.'

Đến here can only be a [+L] P marking the case form of the TIME case relation. It would not make sense to say that a coverb is a preposition when it occurs with TIME and a verb when it occurs with LOCATIVE.

Thus, the functions of coverbs comply with the definition of "P" and, as Ps, are a necessary part of the description and classification of verbs.

5.3.2 CASE FRAMES FOR LOCATIVE VERBS

Once it is shown that the coverbs are prepositions, it becomes necessary to explain the relationship between them and their corresponding verbs. To do this, we will first examine the characteristics of the verbs.

With a few exceptions, the Vs in the example sentences of Sec. 5.1.1, Vietnamese Locative Coverbs, are followed by nouns that are locative in one sense or another. In most instances the noun itself has the feature [+place] in its lexical entry, as Huế (place name), đây 'here', and phòng 'room' in (5.3), (5.13), and (5.25), respectively. The relevant parts of these sentences are repeated here:

- (5.3) ...tôi sẽ ra Huế 'I'll come to HUE.'
 (5.13) anh lại đây chơi nhé 'Come on over HERE...'
 (5.25) Lan vô phòng học... 'Lan went into the classroom.'

Cô 'Miss' in (5.6) is not inherently a [+place] noun.

- (5.6) bao giờ cô qua cô Lan chơi 'When are you going over to MISS Lan's to visit?'

In this sentence it is a derived [+place] noun meaning 'Miss Lan's place', a feature which is required by the presence of the locative semantic property of the verb qua. In fact, all the verbs which have corresponding [+L] coverbs have a locative semantic property which causes them to have in their lexical entries the case frame feature [+__[+LOC]], stating that the verb must be followed by a noun which has a LOCATIVE case relation with the verb. All of them belong to the class of OBJECTIVE-LOCATIVE verbs. (See discussion of OBJECTIVE-LOCATIVE verbs in Secs. 3.3.5.4-6.)

We might ask whether or not LOCATIVE is really obligatory for these verbs. In the examples in Sec. 5.1.1, the verbs về 'return' and ra 'go out' in (5.18) and (5.22), respectively, are not followed by LOCATIVE case nouns.

- (5.18) tôi vừa đi thăm các đảo Hạ-Uy-Di về
 'I've just visited the islands of Hawaii and returned.'
 (5.22) em ra đi, ... 'When I went away...'

OBJECTIVE-LOCATIVE-Location verb ở and the subclass of OBJECTIVE-LOCATIVE-Goal verbs whose LOCATIVES must occur in the AC case form. (See Sec. 3.3.5.6 and Sec. 3.3.5.4, group 2 of O-L-Goal verbs.) These verbs are characterised by the features

$$\left[\begin{array}{l} + ___ ([+AC, +LOC]) \\ - ___ [+L, +LOC] \end{array} \right]$$

As shown in Sec. 3.3.3, these verbs do not have AGENTIVE in their case frames although the direction verbs can take INSTRUMENTAL in the I case form. Their subjects are in the OBJECTIVE case. They all share the following case frame features, with the exception that [+location] ở cannot take INSTRUMENTAL.

$$\left[\begin{array}{l} +V \\ +[+NM, +OBJ] ___ \\ + ___ ([+I, +INS]) \\ + ___ ([+AC, +LOC]) \\ - ___ [+L, +LOC] \\ - ___ [+AC, +INS] \\ +locative \end{array} \right]$$

The location verb ở 'be in/at' has the feature [-dir], which implies [+lcn] (see Sec. 3.3.4.1 for locative subcategorisation and redundancy rules). The verb đến/tới 'arrive at' has the feature [+ter], which implies [+gol] and [+dir]. All the other members of this class share the feature [+gol], though each has additional semantic and phonological features distinguishing it from the others. They are qua/sang 'go across (to)', lại 'come (back to)', về 'return (to)', ra 'go out (to)', vào/vào 'go in (to)', lên 'go up (to)', and xuống 'go down (to)'. The glosses '(to)' indicate that the LOCATIVES of [+gol] verbs may be marked either [+ter] or [+path] by subcategorisation rules.

The verb đi 'go', as discussed above in Sec. 5.1.2, is an OBJECTIVE-LOCATIVE-Goal verb and, as a member of that class, shares with this set of OBJECTIVE-LOCATIVE verbs the feature [+ ___ ([+AC, +LOC])]. However, since đi freely occurs with [+L] prepositions, it can have [+ ___ ([+L, +LOC])]. Thus, đi does not have both of the characteristic case frame features of the verbs under discussion, and never occurs itself as a P with OBJECTIVE verbs. Other verbs of direction which share with đi the feature [+ ___ ([+L, +AC], +LOC)], and do not have corresponding prepositions, include ghé 'stop by', ngồi 'sit', and nằm 'lie'.

It is the presence of [+ ___ ([+AC, +LOC])] that puts such verbs as đi and the locative verbs which have corresponding Ps in a single class of verbs, and the presence of [- ___ [+L, +LOC]] in these latter verbs that makes them a special class apart from verbs like đi. Thus, it turns out

that a verb's ability to have a corresponding coverb in Vietnamese can be directly correlated with its case frame as a verb, and ultimately with the semantic properties that underlie the case frame.

5.3.3 COVERBS IN THE LEXICON

It was shown in the preceding section that the locative verbs which have corresponding prepositions constitute a particular class of verbs. It was found that a verb's ability to have a corresponding coverb is directly correlated with its case frame as a verb. The feature matrices of the coverbs look very much like the feature matrices of their corresponding verbs, with differences which are characteristic of the different syntactic functions of Ps and Vs.

The feature matrices of Ps, like those of Vs, include a case frame. Unlike Vs, which may have from one to several case frame features, Ps have only one case frame feature, a feature which states the case relation or relations which may occur with that P. This is, of course, because, in a sentence, a P must have one - and only one - cooccurring case relation; while a V may have none or many cooccurring case relations. These facts reflect a significant difference between Ps and Vs: A P forms an exocentric construction with an NP, the P and the NP both being obligatory to the PP construction; a V is the head of an endocentric construction (the sentence) of which it is the only obligatory element. In addition, a P is labelled with the one case form it marks. If [+ACR] and [+BCR] stand for case relations, [+A] is a case form, and [+S_i] and [+F_j] are distinctive semantic and phonological features, respectively, a minimal representation of a P feature matrix in Vietnamese will look like this:

$$\left[\begin{array}{l} +P \\ +A \\ + ___ [\{ +ACR, +BCR \}] \\ +S_i \\ +F_j \end{array} \right]$$

Because the coverbs are homophonous and synonymous with their corresponding verbs, in the mind of the speaker they are a special class of Ps, derived from verbs. This derivational relationship can be expressed in the form of a derivational rule (DR). As stated in Sec. 2.2.3 above, a DR relates a class of lexical items, identified by certain shared features, with members of another class of lexical items. Frequently, in DRs, only selected semantic features are carried over from one item to the other and the bulk of semantic features in the derived item are

unpredictable. (Very often in historical derivation, semantic shifts are such that the semantic properties of a derived item are completely unpredictable and in the synchronic grammar there may no longer be a derivational rule.) However, the relationship between the coverbs and their corresponding verbs is so close in Vietnamese that not only the entire set of phonological features (a change in stress features would be attributable to phonological rules pertaining to the change in syntactic function, not a feature of the lexical items) but also all the inherent semantic features of the source item are carried over to the derived item.

The DR which relates these coverbs to their corresponding verbs will be called the Coverb Derivational Rule. It is formulated as follows:

$$\text{CDR.} \quad \left[\begin{array}{l} +V \\ + ___ [+AC, +LOC] \\ - ___ [+L, +LOC] \\ <+direction> \\ -source \\ \alpha S_i \\ \beta F_j \end{array} \right] \quad \rightarrow \quad \left[\begin{array}{l} +P \\ +DERV \\ +L \\ + ___ [+AC, \{+LOC, <+TIM>\}] \\ <+direction> \\ -source \\ \alpha S_i \\ \beta F_j \end{array} \right]$$

in which S_i represents distinctive semantic features and F_j distinctive phonological features. The feature $[+ ___ [+AC, \{+LOC, +TIM\}]]$ can actually be omitted from this rule since it can be specified for $[+L]$ Ps by the redundancy rule

$$\text{RR.} \quad \left[\begin{array}{l} +L \\ <+dir> \end{array} \right] \quad \rightarrow \quad [+ ___ [+AC, \{+LOC, <+TIM>\}]],$$

which would also apply to underived $[+L]$ Ps, making a more general statement. The feature is stated redundantly in this study to more clearly show the case frame of the derived lexical items. In any case, the feature $[+AC]$ is redundant since $[+AC]$ is specified for the case relations of all Ps (Sec. 3.2.2.0).

The CDR claims that, for every lexical entry which is marked $[+ ___ [+AC, +LOC]]$, $[- ___ [+L, +LOC]]$, and $[-source]$, there is a homophonous and synonymous derived preposition with the case form L, requiring a following LOCATIVE or TIME noun, and having the same feature of direction as the verb lexical entry. The P case frame must show that only a $[+direction]$ P can occur with a TIME noun; that is, in Vietnamese, the $[-direction, +location]$ \bar{o} does not occur with TIME.

In other words, that set of OBJECTIVE-LOCATIVE verbs which cannot take their LOCATIVES with a preposition is the very set of locative-type

verbs which can occur as L prepositions with another verb. (See Secs. 3.3.5.4, OBJECTIVE-LOCATIVE-Goal verbs, and 5.3.2, Case Frames for Locative Verbs.) It is not hard to see why this should be so. Since these verbs are already semantically locative, their LOCATIVE adjuncts need no additional overt identification other than their especially close association with a semantically locative verb. They are free to occur in the most neutral non-subject case form, [+AC]. In this sense, then, these verbs already "mark" the [+LOC] case relation. It is not surprising that they should eventually also be used to "mark" [+LOC] constituents in sentences in which they are not the main verb.

To illustrate the operation of CDR, the derivation of two coverbs as partially specified lexical items is given, and some of the example sentences with coverbs, given above in Sec. 5.1.1, are repeated here with branching tree structures and case-related feature marking.

ở 'be in/at'

[	+V]
[	+ [+NM, +OBJ] ____]
[	+ ____ ([+AC, +LOC])]
[	- ____ [+L, +LOC]]
[	- ____ [+INS]]
[	-direction]
[	+S _i (other)]

>→

ở 'in, at'

[	+P]
[	+DERV]
[	+ ____ [+AC, +LOC]]
[	+L]
[	-direction]
[	+S _i (other)]

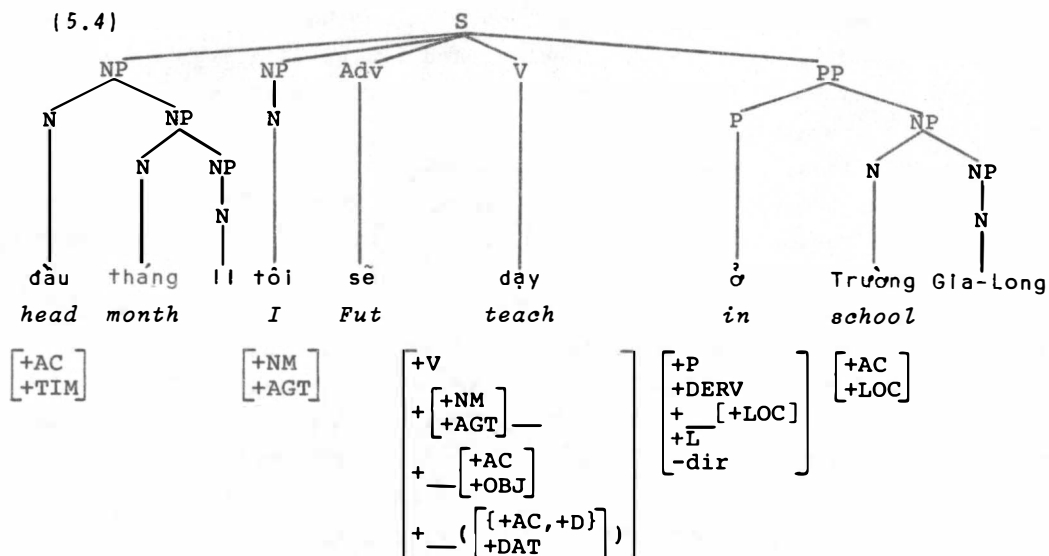
ra 'go out (to)'

[	+V]
[	+ [+NM, +OBJ] ____]
[	+ ____ ([+AC, +LOC])]
[	- ____ [+L, +LOC]]
[	+ ____ ([+I, +C], +INS)]
[	+direction]
[	-source]
[	+S _i (other)]

>→

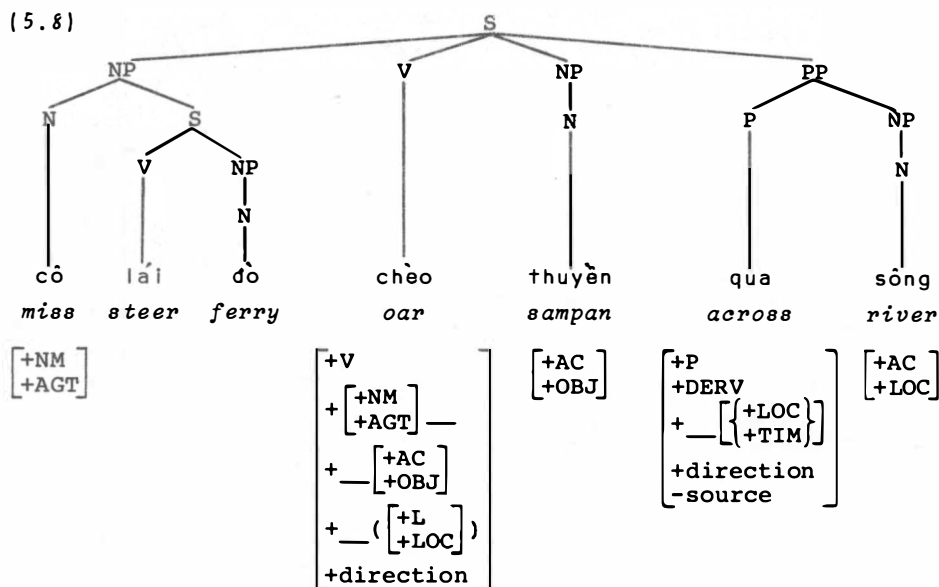
ra 'out to'

[	+P]
[	+DERV]
[	+ ____ [+AC, {+LOC, +TIM}]]
[	+L]
[	+direction]
[	-source]
[	+S _i (other)]

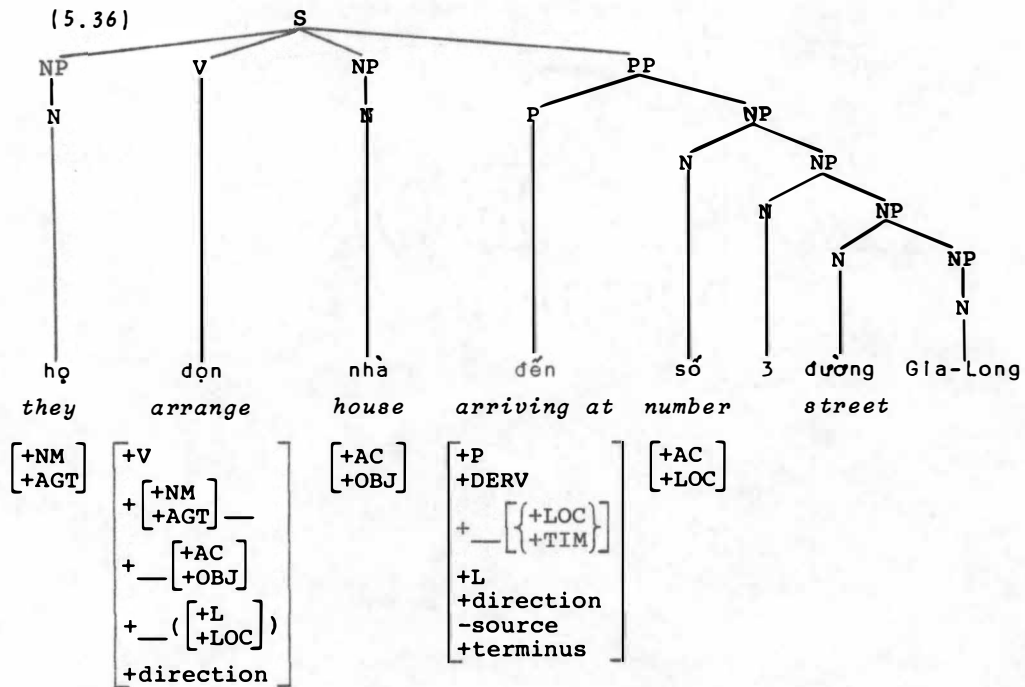


'At the beginning of November, I'm going to teach at Gia-Long School.'

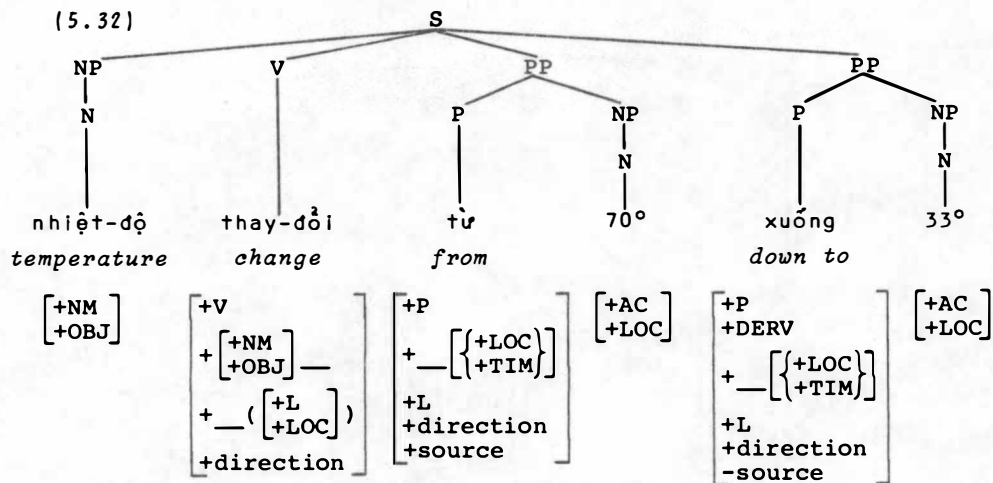
The verb dạy can, by a general redundancy rule, take a [-direction] LOCATIVE. (See Sec. 3.3.2 for RRs for verbs.)



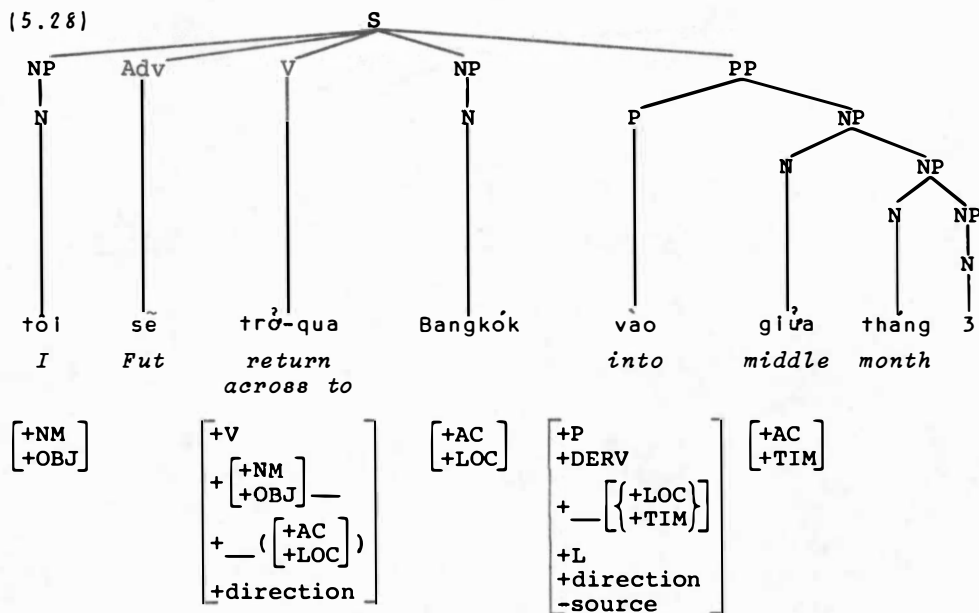
'The barge girl oared the boat across the river.'



'They moved to No. 3 Gia-Long Street.'

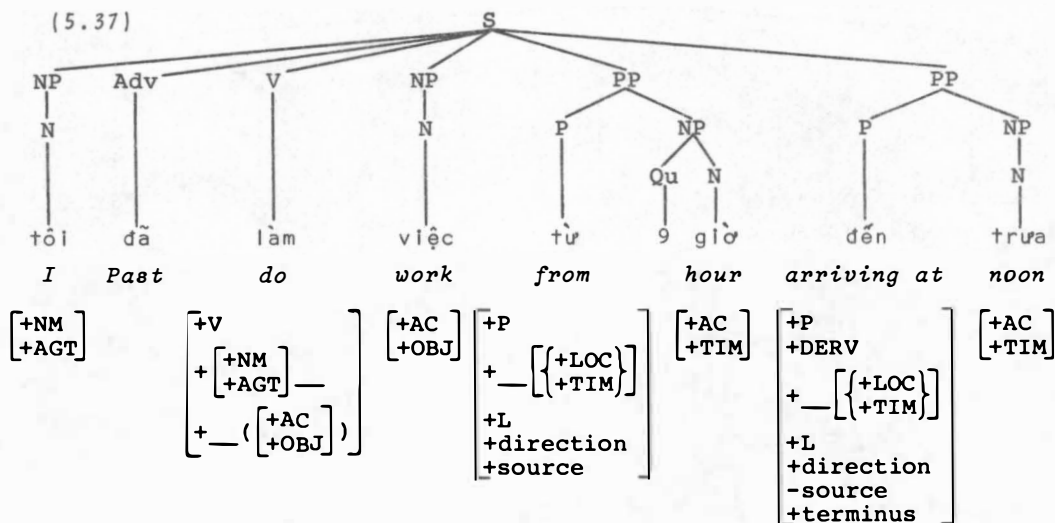


'The temperature changed from 70° down to 33°.'



'I'll return to Bangkok in the middle of March.'

The Coverb Derivation Rule will have to exclude such compound verbs with included direction words as *trở-quá* from having derived prepositions.



'I worked from 9 o'clock until noon.'

5.4 THE DATIVE COVERB IN THE LEXICON

In addition to the locative coverbs discussed in the preceding sections, there is one other verb in Vietnamese which has a corresponding coverb. That is the verb *cho* 'give (to)'. Sentence (5.88) shows *cho* as a verb.

(5.88)	ông-ấy	vừa	<u>cho</u>	con gái	chiếc	xe	Huê-Kỳ
	he	just	give	daughter	cl	vehicle	America
	[+NM +AGT]			[+AC +DAT]		[+AC +OBJ]	

'He just gave his daughter an American car.'

(Nguyen D-H 1966:68)

Cho is a [+D] coverb which occurs with AGENTIVE-DATIVE-Goal verbs, as shown in (5.89) and (5.90). As discussed in Sec. 3.2.2.3 above, DATIVE can occur either before or after OBJECTIVE. If it occurs before OBJECTIVE, the case marker *cho* is optional, as in

(5.89)	anh	đưa	(<u>cho</u>)	chị	ấy	cái	đó
	elder	hand	to	elder	that	thing	that
	bro.			sis.			
	[+NM +AGT]	[+ — [{+D, +AC}] +DAT]		[+D]	[+AC +DAT]	[+AC +OBJ]	
		[— [+OBJ] [+AC +DAT]					

'Give her that thing, brother.'

(Tran 1971:7)

If DATIVE occurs after OBJECTIVE, *cho* is obligatory, as in

(5.90)	tôi	sẽ	trả	lời	<u>cho</u>	người	đó	trước
	I	Fut	pay back	word	to	person	that	before
	[+NM +AGT]	[+ — [{+D, +AC}] +DAT]		[+AC +OBJ]	[+D]	[+AC +DAT]		
		[— [+OBJ] [+AC +DAT]						

'I'll answer that person first.'

The verb *cho* is an AGENTIVE-DATIVE-Goal verb (see Sec. 3.3.5.1.1) but differs from other A-D-Goal verbs in Vietnamese in that its DATIVE must always occur immediately following the verb, as in (5.91) and (5.92), except when it is topicalised, as in (5.93), and must always be in the AC case form.

(5.91)	họ	<u>cho</u>	ai	tiền	(Liem 1969:48)
	they	give	who	money	
	[+NM +AGT]		[+AC +DAT]	[+AC +OBJ]	

'Who did they give money to?'

- (5.92) cho tôi một gói thuốc
 give I one package tobacco
 [+AC] [+AC]
 [+DAT] [+OBJ]

'Give me a pack of cigarettes.'

- (5.93) ông ấy họ đã cho một vé
 gentleman that they Past give one ticket
 [+AC] [+NM] [+AC]
 [+DAT] [+AGT] [+OBJ]

'To that man they have given a ticket.' (Liem 1969:13)

Sentence (5.93) is acceptable only in a context of contrast with a preceding or following sentence, such as còn tôi phải mua (*remain, I, must, buy*) 'As for me, I had to buy mine.'

The DATIVE is optional, as in (5.94), where the recipient is unspecified.

- (5.94) cho một gói thuốc
 give one package tobacco
 [+AC]
 [+OBJ]

'Give a pack of cigarettes.'

BENEFACTIVE can occur either in the B or the D case form. If a cho co-verb phrase occurs with the verb cho, it is unambiguously BENEFACTIVE since DATIVE with the verb cho must occur in the AC case form. This is shown in (5.95).

- (5.95) cho một gói thuốc { giùm } tôi
 give one package tobacco for I
 [+AC] [+B] [+AC]
 [+OBJ] [+D] [+BEN]

'Give a pack of cigarettes (to somebody else) for me.'

The verb cho has the following lexical entry matrix:

cho 'give'

+V
+ [+NM, +AGT] ____
+ ____ [+AC, +OBJ]
+ ____ ([+AC, +DAT])
- ____ [+D, +DAT]
- ____ [+OBJ] [+DAT]
- ____ [+INS]
+direction
-source

Cho is the only AGENTIVE-DATIVE verb which has a corresponding preposition. It is also the only A-D-Goal verb which cannot take its DATIVE in the D case form. A derivation rule for P cho can be formulated as follows:

<table> <tr><td>+V</td></tr> <tr><td>+ ____ [+AC, +DAT]</td></tr> <tr><td>- ____ [+D, +DAT]</td></tr> </table>	+V	+ ____ [+AC, +DAT]	- ____ [+D, +DAT]	>>	<table> <tr><td>+P</td></tr> <tr><td>+DERV</td></tr> <tr><td>+D</td></tr> <tr><td>+ ____ [+AC, {+DAT, +BEN}]</td></tr> </table>	+P	+DERV	+D	+ ____ [+AC, {+DAT, +BEN}]
+V									
+ ____ [+AC, +DAT]									
- ____ [+D, +DAT]									
+P									
+DERV									
+D									
+ ____ [+AC, {+DAT, +BEN}]									

which shows that the P cho can mark BENEFACTIVE as well as DATIVE.

To postulate a derivation rule for a single lexical entry, however, captures no generalisations (see Sec. 2.2.3) and adds to the complexity of the grammar since it would be possible, instead, to consider cho to be two separate lexical entries, a V and a P. Nevertheless, if the derivation rule for cho is compared with the Coverb Derivation Rule for locative coverbs, given in Sec. 5.3.3 and repeated here,

CDR.	<table><tr><td>+V</td></tr><tr><td>+ ____ [+AC, +LOC]</td></tr><tr><td>- ____ [+L, +LOC]</td></tr><tr><td><+direction></td></tr><tr><td>-source</td></tr><tr><td>αS_i</td></tr><tr><td>βF_j</td></tr></table>	+V	+ ____ [+AC, +LOC]	- ____ [+L, +LOC]	<+direction>	-source	αS_i	βF_j	>+	<table><tr><td>+P</td></tr><tr><td>+DERV</td></tr><tr><td>+L</td></tr><tr><td>+ ____ [+AC, {+LOC, <+TIM>}]</td></tr><tr><td><+direction></td></tr><tr><td>-source</td></tr><tr><td>αS_i</td></tr><tr><td>βF_j</td></tr></table>	+P	+DERV	+L	+ ____ [+AC, {+LOC, <+TIM>}]	<+direction>	-source	αS_i	βF_j
+V																		
+ ____ [+AC, +LOC]																		
- ____ [+L, +LOC]																		
<+direction>																		
-source																		
αS_i																		
βF_j																		
+P																		
+DERV																		
+L																		
+ ____ [+AC, {+LOC, <+TIM>}]																		
<+direction>																		
-source																		
αS_i																		
βF_j																		

significant parallels can be seen. Cho shares with the locative coverbs the feature [-source] and a feature regarding direction. The necessary condition for both rules is that the verb have an "inner" non-OBJECTIVE case relation and that that case relation occur only in the AC case form and never occur in the case form most closely associated with that case relation. In fact, it is this very condition which appears to be the

essential characteristic of coverbs. It is the obligatory AC case form on inner non-OBJECTIVE case relations with certain verbs which sets them apart from other verbs of the same class and paves the way for them to have corresponding prepositions, which, by definition, require that their sister constituents occur in the AC case form.

CDR can be modified as below to incorporate the DATIVE coverb.

$$\begin{array}{ccc}
 \text{CDR.} & \left[\begin{array}{l} +V \\ + \text{---} [+AC, \left\{ \begin{array}{l} +LOC \\ +DAT \end{array} \right\}]_1 \\ - \text{---} [\left\{ \begin{array}{l} +L, +LOC \\ +D, +DAT \end{array} \right\}]_1 \\ <+direction> \\ -source \\ \alpha S_i \\ \beta F_j \end{array} \right] & \rightarrow & \left[\begin{array}{l} +P \\ +DERV \\ \left\{ \begin{array}{l} +L \\ +D \end{array} \right\} \\ 1 \left\{ \begin{array}{l} +L \\ +D \end{array} \right\}]_1 \\ + \text{---} [+AC, \left\{ \begin{array}{l} +LOC, <+TIM> \\ +DAT, +BEN \end{array} \right\}]_1 \\ <+direction> \\ -source \\ \alpha S_i \\ \beta F_j \end{array} \right]
 \end{array}$$

CHAPTER VI

COVERBS IN SOUTHEAST ASIAN LANGUAGES - IMPLICATIONS FOR FURTHER INVESTIGATION

6.1 THE AREAL HYPOTHESIS

The existence of coverbs - prepositions which have corresponding homophonous and synonymous verbs - is not unique to the Vietnamese language in Southeast Asia. In fact, many languages of the area, without regard to genetic relationship, share not only the coverb phenomenon but other syntactic characteristics. Franklin Huffman begins his paper *Thai and Cambodian - A Case of Syntactic Borrowing?* (Huffman 1973) by saying, "No one who has a passing familiarity with Thai and Cambodian can fail to be struck by the remarkable similarity of syntactic structure between the two languages" (p. 488).

I believe that these similarities are due in large part to long and extensive language contact. There is evidence of much movement and population resettlement in the whole area. "...centuries of migrations, trade, and political relationships link the peoples of Burma, Thailand, Laos, and Vietnam with the southern provinces of China... This entire region, which might be termed greater mainland Southeast Asia, forms an integrated whole for the purposes of the study of racial and linguistic history, ethnic distribution, and cultural evolution" (Lebar, Hickey, Musgrave 1964:vi; also see LHM 1964:187,189; and Cady 1964:14-20). Haas (1965:viii) states that "long contact among members of the various indigenous linguistic families has given rise to certain broad similarities characteristic of a linguistic area."

Emeneau (1956:16) defines "linguistic area" as "an area which includes languages belonging to more than one family but showing traits in common which are found not to belong to the other members of (at least) one of the families." Haas (1969:83) prefers the term "diffusion

area" as reflecting cultural as well as linguistic diffusion, and observes, "Even among genetically unrelated languages striking structural resemblances are often found spread over wide geographical areas" (pp. 82-3).

Henderson (1965:401) states, "In the course of investigations extending over many years into the present phonological and grammatical structure of a variety of languages on the South East Asian mainland, my attention has...inescapably been drawn to a number of features which suggest themselves as characteristic of the area, or of sub-areas within the larger area." Huffman (1973:490, fn.7), in comparing the order of syntactic elements in Thai and Cambodian, states that "within the context of Southeast Asia as a linguistic area the order of syntactic elements is by no means random, but this fact implies mutual influence in the area and supports the conclusion that the syntactic similarities concerned are not coincidental."

Specific cross-language comparisons in phonological or grammatical structure have been made not only by Huffman (1973) but also by Cooke (1968), Henderson (1965), Honey and Simmonds (1963), Jones (1970), E. Lee (1974), Liem (1973b), and Nacaskul (1973). (Also see bibliography in Huffman 1973.)

The coverb phenomenon is one of the areal features of Southeast Asia, one of the features characteristic of the languages of the area, possibly as a result of language contact. This study will not be concerned with the probable direction of influence. For a discussion of direction of borrowing in Thai and Khmer, see Huffman 1973:28-37.

6.2 THE EVIDENCE

6.2.0 INTRODUCTION

The claim that coverbs are an areal feature is based on evidence found not only in Vietnamese but in various Tai languages (Thai (Siamese), Lao, Black Tai), in Mon-Khmer languages (principally Khmer, but also some occurrences of coverbs in the Mountain Mon-Khmer languages, Chrau (D.D. Thomas 1971 and personal communication, and D.M. Thomas 1969), Jeh (Gradin 1970a and 1970b), and Sedang (Smith 1969 and personal communication)), and in Chinese (for Mandarin see Chapter IV above, for Taiwanese see Chen 1972). I have not yet made any investigations into Burmese or the Austronesian languages in the area. Much more investigation needs to be done on all the languages, but even this superficial comparison shows striking similarities, giving support to the hypothesis.

Speaking of Thai and Khmer, Huffman (1973:488) states that "many semantically equivalent forms, or words, seem to share identical ranges of syntactic occurrence." One of the types of forms he gives as example is what he calls "directional verbs". These are what I have called coverbs in Vietnamese and Chinese, and they function in much the same way in Khmer and Thai as they do in Vietnamese. In the following sections, a rather cursory review of the facts in each language - Khmer and Thai - is given. In Sec. 6.2.3, some comparison of all three languages - Vietnamese, Khmer, and Thai - is made. For explanation of orthography and sources for the languages, see Sections 1.3 and 1.4 above.

6.2.1 KHMER

6.2.1.1 Coverbs, Prepositions, and Relator Nouns

6.2.1.1.1 *Khmer Coverbs*

In Khmer, the national language of Cambodia, there are a number of words which can be analysed as coverbs. Huffman (1970:138-9) gives a list of "directional verbs", which "occur after primary verbs which are non-specific as to direction or goal, and specify the direction or general orientation of action initiated by the verb" (p. 138). (See Sec. 5.1.3 for discussion of Vietnamese coverbs as adverbs.) In 1973, he says, "Most members of the class occur also as primary verbs...when directional verbs are followed by a substantive object, they have a prepositional function" (1973:497). Following is his list, including glosses; I have designated what I believe to be the correct case form (CF) features for each coverb and added the meanings these words have when used as main verbs. Since most of the coverbs are marked [+L,+gol], the definition of the Goal sub-CF from Sec. 3.2.2.4.3 is repeated here: "The Goal Sub-CF marks the path or goal toward which the action of the verb is directed; that is, the noun associated with a Goal sub-CF names the path or intended terminal point of the action of the verb, never the point of origin." The feature marking of these [+gol] coverbs in example sentences gives only their lexical marking of Goal ([+gol]) and not the semantic interpretation as Path ([+path]) or Terminus ([+ter]) for particular sentences, as determined by sub-categorisation rules. (See Sec. 3.3.4.1 for subcategorisation and redundancy rules regarding Direction.)

	PREPOSITION		VERB
niw	<i>still, remaining at</i>	[+L,+lcn]	<i>be in/at</i>
tiw	<i>orientation away from speaker in space</i>	[+L,+gol]	<i>go to</i>
mɔɔk	<i>orientation toward speaker in space</i>	[+L,+gol]	<i>come to</i>
coul	<i>in, into</i>	[+L,+gol]	<i>go in to</i>
cəñ	<i>out, out of</i>		<i>go out</i>
laəŋ	<i>up, upward</i>	[+L,+gol]	<i>go up to</i>
coh	<i>down, downward</i>	[+L,+gol,-ter]	<i>go down</i>
taam	<i>along, following</i>	[+L,+gol,-ter]	<i>follow</i>
qaoy	<i>on behalf of, for (familiar)</i>	[+D]	<i>give</i>
cuun	<i>on behalf of, for (formal)</i>	[+D]	<i>give (honorific)</i>

Elsewhere (p. 408), he also gives as a directional verb

claaŋ	<i>across</i>	[+L,+gol,-ter]	<i>go across</i>
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and on page 409 he gives as both a verb and a preposition

dal	<i>to, until, reaching</i>	[+L,+ter]	<i>reach, arrive</i>
	<i>to</i>		<i>at</i>

In a list of "attributive verbs", Ehrman (1972:77-8) includes *taam*, *niw*, *dal*, *qaoy* ('for, to; give'), *cuun* ('for, to; give'), and the following (all meanings given are hers):

huoh	<i>more than</i>	<i>pass</i> (cf. Vietnamese <i>qua</i>)
cwael	<i>around</i>	<i>go around</i>
wuəŋ	<i>around</i>	<i>go around, encircle</i>
com	<i>exactly at</i>	<i>hit exactly, be on target</i>
tuel	<i>facing</i>	<i>support face to face</i>

Speaking of these verbs and some others not within the scope of this study, she says that English prepositional phrases can be translated

into Khmer by "a verb phrase which is attributive to what precedes" (p. 77) and that these words can be verbs in such verb phrases.

Jacob (1968:137), in a list of "prenominal particles", includes *taam* 'following, by, along', *niw* 'at', and *dal* 'until, as far as, towards (of feelings)', and marks them as also occurring as verbs.

The word *cəñ* 'out, go out' is included in Huffman's list of directional verbs since it can occur as a directional adverb, as in (6.1).

- (6.1) koet tuul səmlaa cəñ tiw srae (S. Pou)
 3p head stew out to rice
 carry field
 [+NM] [+AC] [+Adv] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]

'She carried (on her head) the stew out to the ricefields.'

However, *cəñ* never occurs as a P; that is, *tiw* in (6.1) cannot be omitted. Thus, *cəñ* is not a coverb. Furthermore, *cəñ* as a verb cannot take its LOCATIVE in the AC case form, i.e. (6.2) is ungrammatical, whether with a Source LOCATIVE or a Goal LOCATIVE. Its LOCATIVE must be marked by a directional preposition, as in (6.3) and (6.4).

- (6.2) * qom cəñ {ptəh
 older sib go out house
 of parent }
 {srae
 ricefield}

'Aunt went out {from the house.},
 {to the field.}'

- (6.3) qom cəñ tiw srae (S. Pou)
 [+NM] [+L] [+AC]
 [+OBJ] [+gol] [+LOC]

'Aunt went out to the field.'

- (6.4) toəp cəñ pii nəkɔɔ peel prɪk (S. Pou)
 army go out from city time morning
 [+NM] [+L] [+AC] [+AC]
 [+OBJ] [+src] [+LOC] [+TIM]

'The army left the city in the morning.'

These facts are consistent with the coverb derivation hypothesis that an OBJECTIVE-LOCATIVE verb which can have a corresponding P must take its inner LOCATIVE in the AC case form. For these reasons, Khmer *cəñ* is not included in the cross-language list of coverbs in Sec. 6.2.3.1 below.

The word *coh* 'down, go down' is limited in its occurrence as a coverb. Both as a V and as a P, it is [-ter], i.e. it can mean only

'through space' not 'toward/to a point'. Examples of coh as a [-ter] V, (6.5), and as a [-ter] P, (6.6), are given.

- (6.5) dəmɾəy coh tuənlee (S. Pou)
 elephant go down river
 $\begin{bmatrix} +NM \\ +OBJ \end{bmatrix}$ $\begin{bmatrix} + _ ([+LOC]) \\ -ter \end{bmatrix}$ $\begin{bmatrix} +AC \\ +LOC \end{bmatrix}$

'The elephant went down into the river (through the water).'

- (6.6) Məla tuul khao-qaaw coh tuənlee (S. Pou)
 head clothes down river
 carry
 $\begin{bmatrix} +NM \\ +AGT \end{bmatrix}$ $\begin{bmatrix} +AC \\ +OBJ \end{bmatrix}$ $\begin{bmatrix} +L \\ +gol \\ -ter \end{bmatrix}$ $\begin{bmatrix} +AC \\ +LOC \end{bmatrix}$

'Malaa carried the clothes down in the river (through the water).'

When a LOCATIVE goal occurs with the verb coh, it must be marked with a [+gol] P, as in (6.7).

- (6.7) Məla coh tiw tuənlee (S. Pou)
 go down to river
 $\begin{bmatrix} +NM \\ +OBJ \end{bmatrix}$ $\begin{bmatrix} +L \\ +gol \end{bmatrix}$ $\begin{bmatrix} +AC \\ +LOC \end{bmatrix}$

'Malaa went down to the river.'

When a LOCATIVE goal occurs with another verb, coh may occur as a directional adverb while the LOCATIVE is marked with a [+gol] P, as in (6.8); coh cannot be the [+gol] P in this case.

- (6.8) Məla tuul khao-qaaw coh tiw moət tuənlee (S. Pou)
 head clothes down to edge river
 carry
 $\begin{bmatrix} +NM \\ +AGT \end{bmatrix}$ $\begin{bmatrix} +AC \\ +OBJ \end{bmatrix}$ [+Adv] $\begin{bmatrix} +L \\ +gol \end{bmatrix}$ $\begin{bmatrix} +AC \\ +LOC \end{bmatrix}$

'Malaa carried the clothes down to the riverbank.'

These facts, too, are consistent with the coverb derivation hypothesis. It remains only to assign features to the lexical entry matrix of V coh to allow it to take a [+AC] LOCATIVE which is semantically [-ter] (thus allowing it to become a [-ter] coverb) and a [+L,+ter] LOCATIVE, thus blocking it from becoming a [+ter] coverb.

The word claaŋ 'across, go across', like coh, is also a [-ter] V and P, and the same set of facts applies.

The word taam 'following, follow' does not follow the usual pattern of locative verbs and markers. (For discussion of similar problems with Vietnamese theo 'following, follow', see Sec. 5.1.2 above.) As a verb,

taam cannot take a LOCATIVE at all, unless a moving object can be considered a LOCATIVE, i.e. (6.9) is ungrammatical, (6.10) is grammatical.

- (6.9) * koət taam pləw (tiw Kræceh)
 3p follow road go to
 'She followed the road to Kratie.'

- (6.10) koət taam {Səri} (S. Pou)
 3p follow {laan}
 {auto}
 'She followed {Sarii.}
 {the car.}'

However, taam appears to occur as a [+L,+lcn] or a [+L,-ter] preposition, as in (6.11) and (6.12), respectively.

- (6.11) chəə nuh kee tiw kap taam khaet (Huffman
 wood that 3p go chop following province 1970:366)
 [+AC] [+NM] [+L] [+AC]
 [+OBJ] [+AGT] [+lcn] [+LOC]
 'They cut the wood in the provinces.'

- (6.12) kñom quhsaa mɔk taam pləw nih nah (Huffman
 I often come following road this very 1970:217)
 [+NM] [+L] [+AC]
 [+OBJ] [-ter] [+LOC]
 'I've come along this road often.'

It may be that taam in (6.12) is an adverb rather than a P. The problems of taam will not be gone into in this study.

Besides occurring as an AGENTIVE-DATIVE verb 'give', cuun also occurs as an AGENTIVE verb meaning 'accompany, escort' (which perhaps requires an embedded sentence), as in (6.13).

- (6.13) qəyləw kñom cuun look tiw məəl Woət-Pnum
 now I escort Sir go see temple compound
 [+NM] [+AC] [+AC]
 [+AGT] [+OBJ] [+OBJ]
 'Now I'll take you to see Wat Phnom.' (Huffman 1970:230)

It is presumed that cuun 'give' and cuun 'accompany' are two separate synchronically underived lexical items since neither can be predicted from the other.

As in Vietnamese, most of these words can occur as directional adverbs. (See Sec. 5.1.3 above for discussion of adverbial uses of Vietnamese OBJECTIVE-LOCATIVE verbs of direction.) Huffman (1973:497) states that when directional verbs occur in final position in the phrase, they

have an adverbial function. He gives the following example:

- (6.14) yɔɔk həp nih tiw
 take box this go
 [+AC] [+Adv]
 [+OBJ]

'Take this box away.'

Another example is (6.15).

- (6.15) tuuk nuh dək tnam mɔɔk pii Kəmpuəŋ-Caam
 boat that carry tobacco hither from port
 [+NM] [+AC] [+Adv] [+L] [+AC]
 [+INS] [+OBJ] [+src] [+LOC]

'That boat is bringing tobacco from Kampong Cham.'

(Huffman 1970:183)

Examples of some of these words as Vs and as Ps in sentences have been given above. Examples of the remainder are given below, with the word in question underlined. Relevant categories and case features are postulated in line with those hypothesised for Vietnamese in Chapters III and V above.

- (6.16) salaa niw qae-naa
 school be in where
 [+NM] [+V] [+AC]
 [+OBJ] [+lcn] [+LOC]

'Where is the school?'

- (6.17) look Sok twæ kaa niw kənlaen nin
 Sir do work in place Det
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+L] [+LOC]
 [+lcn]

'Mr Sok works at that place.'

(Ehrman 1972:11)

- (6.18) niw psaa nih miən mənuh craən nah
 in market this have person much very
 [+P] [+AC] [+AC]
 [+L] [+LOC] [+OBJ]
 [+lcn]

'There are a lot of people at this market.' (Huffman 1970:43)

Unlike Vietnamese ³, Khmer *niw* can be used to mark the TIME case relation, as in (6.19).

- (6.19) nɪw tɲay nɪh kɲom tɪw Kəmpuəŋ-Caam (Jacob 1968:68)
in day this I go
 [+P] [+AC] [+NM] [+V] [+AC]
 [+L] [+TIM] [+OBJ] [+gol] [+LOC]
 [+lcn]

'I'm going to Kampong Cham today.'

- (6.20) yəəŋ tɪw srok Kmae khae kraoy (Ehrman: 1972:107)
we go country Khmer month behind
 [+NM] [+V] [+AC] [+AC]
 [+OBJ] [+gol] [+LOC] [+TIM]

'We're going to Cambodia next month.'

- (6.21) yɔɔk qəywan nɪh tɪw bəntup (Huffman 1970:138)
take thing this to room
 [+AC] [+P] [+AC]
 [+OBJ] [+L] [+LOC]
 [+gol]

'Take these things to the room.'

- (6.22) kee mɔɔk kənlaəŋ nɪh theə qəy (Huffman 1970:229)
3p come place this do what
 [+NM] [+V] [+AC] [+AC]
 [+OBJ] [+gol] [+LOC] [+OBJ]

'What have they come for?'

- (6.23) yɔɔk qəywan nɪh mɔɔk pteəh (Huffman 1970:140)
take thing this to house
 [+AC] [+P] [+AC]
 [+OBJ] [+L] [+LOC]
 [+gol]

'Bring these things to the house.'

- (6.24) kɲom nɪn tɪw som cbap-qəqnuññaat coul weəŋ (Huffman 1970:230)
I Fut go ask permit go in palace
 [+NM] [+V] [+AC] [+V] [+AC]
 [+OBJ] [+gol] [+OBJ] [+gol] [+LOC]

'I'll go ask for a permit to enter the palace.'

- (6.25) kee yɔɔk dəmrəy tieñ coul tuənlee (Huffman 1970:366)
3p take elephant pull into river
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+L] [+LOC]
 [+gol]

'They use elephants to pull (the wood) into the river.'

- (6.26) kaal-naa ñam baay ruəc, yəəŋ tiw laəŋ pnum
 when eat rice finish we go go up mountain
 [+AC] [+NM] [+V] [+V] [+AC]
 [+OBJ] [+OBJ] [+gol] [+gol] [+LOC]

'When we've finished eating, we'll go climb the mountain.'

(Huffman 1970:204)

- (6.27) yɔk qəywan nuh laəŋ ləə pteəh
 take thing that up to top house
 [+AC] [+P] [+AC]
 [+OBJ] [+L] [+LOC]
 [+gol]

'Take those things up to the house.'

- (6.28) bæ look cłaəŋ tnal nin khəəñ sənthəkiə muəy tiət
 if Sir cross street Fut see hotel one further
 [+NM] [+V] [+AC] [+AC]
 [+OBJ] [-ter] [+LOC] [+OBJ]

'If you cross the street, you'll see another hotel.'

(Huffman 1970:132)

- (6.29) Səri bəñcuun tuuk cłaəŋ stiŋ
 send boat across stream
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+L] [+LOC]
 [-ter]

'Sarii sent the boat across the stream.'

- (6.30) kəpal dəl Kəmpuəŋ Caam qaatit mun
 ship arrive week before
 [+NM] [+V] [+AC] [+AC]
 [+OBJ] [+ter] [+LOC] [+TIM]

'The ship arrived at Kampong Cham last week.'

- (6.31) Sərun dəə dəl pteəh Nael
 walk reaching house
 [+NM] [+P] [+AC]
 [+OBJ] [+L] [+LOC]
 [+ter]

'Sarun walked to (as far as) Nael's house.'

- (6.32) kñom qaoy luy koət
 I give money 3p
 [+NM] [+V] [+AC] [+AC]
 [+AGT] [+OBJ] [+DAT]

'I'll give him some money.'

(Ehrman 1972:43)

- (6.33) hoc sabuu haey-niŋ kənsaəŋ-cuut-kluaŋ qaoy kñom phaəŋ
hand soap and towel to I as well
 [+AC] [+AC] [+P] [+AC]
 [+OBJ] [+OBJ] [+D] [+DAT]

'Please hand me the soap and a towel.' (Huffman 1970:149)

As a [+D] preposition, qaoy can mark BENEFACTIVE as well as DATIVE.

- (6.34) qəwpuk tiñ siəwphiw qaoy kñom (Jacob 1968:141)
father buy book for I
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+D] [+BEN]

'Father buys books for me.'

- (6.35) kee cuun ruŋwoən Sərun (S. Pou)
3p give reward
(honorific)
 [+NM] [+V] [+AC] [+AC]
 [+AGT] [+OBJ] [+DAT]

'They gave the reward to Sarun.'

- (6.36) kñom niŋ luəq siəwphiw nih cuun look (S. Pou)
I Fut sell book this to Sir
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+D] [+DAT]

'I'll sell this book to you, Sir.'

- (6.37) look baək twiə cuun kñom phaəŋ (Thach Sarun)
Sir open door for I as well
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+D] [+BEN]

'Open the door for me, please, Sir.'

6.2.1.1.2 Khmer Prepositions

Khmer has some underived prepositions - words which never occur as main verbs. The two which are most relevant to this study are:

qae at, as for, with regard to [+L, +lcn]
 pii from, since [+L, +src]

Also there are taŋ-pii 'from, ever since' (see Huffman 1970:122-3 for the distinction between pii and taŋ-pii), ruəc-pii 'after', etc. Some sentences with these two prepositions follow. Verbs and coverbs from the above list, as well as the two prepositions, are underlined.

- (6.38) gae khaaŋ nuh neəq khəəñ pteəh thom muəy
niw
at side that person perceive house big one
 [+P] [+AC] [+NM] [+AC]
 [+L] [+LOC] [+DAT] [+OBJ]
 [+lcn]

'On that side you see a large house.' (Jacob 1968:68)

- (6.39) gae pləw-rəteh-pləəŋ wiñ miən...pīi Pnum-Piñ tiw Kəmpoət
at railroad again have from to
 [+P] [+AC] [+P] [+AC] [+P] [+AC]
 [+L] [+LOC/OBJ?] [+L] [+LOC] [+L] [+LOC]
 [+lcn] [+src] [+gol]

'As for railroads, there's one from Phnom-Penh to Kampot.'
 (Huffman 1970:354)

- (6.40) kee yɔɔk rəteh-koo dək sɾəw pīi sɾae mɔɔk pteəh
3p take cart-ox carry paddy from rice to house
field
 [+NM] [+AC] [+AC] [+P] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+OBJ] [+L] [+LOC] [+L] [+LOC]
 [+src] [+gol]

'They use ox-carts to haul the paddy from the rice fields to the house.'
 (Huffman 1970:342)

- (6.41) yɔɔk qəywan nuh cəñ pīi pteəh (Huffman 1970:140)
take thing that out from house
 [+AC] [+Adv] [+P] [+AC]
 [+OBJ] [+L] [+LOC]
 [+src]

'Take those things out of the house.'

- (6.42) prəteeh-Kampuɕciə baan qəekkəriəc pīi cnam naa
country obtain independence from year which
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+L] [+TIM]
 [+src]

'When did Cambodia achieve independence?' (Huffman 1970:376)

6.2.1.1.3 Khmer Locative Relator Nouns

Ehrman (1972:78-9) gives the following list of words which she calls "locative nominals" and which can be translated as English prepositions. These locative nominals are what I (following Thompson) have called relator nouns (Nr) (see Sec. 3.2.3 above); they are treated as head nouns in the example sentences which follow. They are marked [+place, +relation] in their lexical entries.

		"as a preposition"
knog	<i>interior</i>	<i>inside</i>
kraw	<i>outside</i>	<i>outside of</i>
lae	<i>top</i> (S. Pou: <i>upper part</i>)	<i>on top of, over</i>
kraom	<i>bottom</i> (S. Pou: <i>lower part</i>)	<i>under</i>
muk	<i>face, front</i>	<i>in front of</i>
kraoy	<i>back part</i>	<i>behind</i>
kendaal	<i>middle</i>	<i>in the middle, between</i>
kbae	<i>area next to</i>	<i>next to</i>
cwein	<i>the left side</i>	<i>to the left of</i>
sdam	<i>the right side</i>	<i>to the right of</i>

Huffman (1970:392-3) gives *kendaal* and the following words as "nouns which are translated as prepositions".

cenlah	<i>space between</i>	(<i>between</i>)
rawien	<i>interval</i>	(<i>during</i>)
khaan	<i>side, direction</i>	(<i>in the matter of</i>)
rebah	<i>thing</i>	(<i>of (Possession)</i>)
camnaek	<i>part</i>	(<i>as for</i>)

- (6.43) yɔɔk qəywan nuh coul knog pteəh (Huffman 1970:140)
 take thing that into inside house
 [+AC] [+P] [+Nr]
 [+OBJ] [+L] [+AC]
 [+gol] [+LOC]

'Take those things into the house.'

- (6.44) yɔɔk qəywan nuh laen lae pteəh (Huffman 1970:140)
 take thing that up to top house
 [+AC] [+P] [+Nr]
 [+OBJ] [+L] [+AC]
 [+gol] [+LOC]

'Take those things up to the house.'

- (6.45) preəh-riəc-qanaacaq Kampucciə niw kraom qanaapyiəbaal prateeh-Baraŋ
 kingdom be in under protectorship country-French
 [+NM] [+V] [+Nr]
 [+OBJ] [+AC]
 [+LOC]

'The Kingdom of Cambodia was under the protectorship of France.'

(Huffman 1970:391)

- (6.46) prateeh-Kampucciə...that niw cənləh (Huffman
 country be placed in space between 1970:389)
 [+NM] [+P] [+Nr]
 [+OBJ] [+L] [+AC]
 [+lcn] [+LOC]

prateeh-Thay-Lan haəy-niŋ prateeh-Wiət-Naam
 country and country

'Cambodia is situated between Thailand and Viet-Nam.'

6.2.1.2 OBJECTIVE-LOCATIVE Verbs in Khmer

Besides the verbs of direction and location listed above which have corresponding coverbs, Khmer has other OBJECTIVE-LOCATIVE verbs which can or must take inner LOCATIVE phrases. (See Sec. 3.3.4.1 for discussion of LOCATIVE in the classification of verbs.) Some of them are:

cəñ	go out, leave (See discussion above and sentences (6.3) and (6.4).)
tleəq	fall
trələp	return, turn
dəə	walk ((6.31) above)
ruət	run
hael(-tik)	swim
hou	flow
qəndaet	float
crook	take shelter
chup	stop
choo	stand
qəŋkuy	sit
kuəŋ	sit, stay, reside (of royalty or clergy)
deik	lie down, sleep
keen	recline, sleep
thət	be placed, situated ((6.46) above)

In general, the case frames of these verbs include the following features:

- (6.52) mɔɔk tiw crɔɔk niw kraom daəm-chəə nuh sən
 come go take in under tree that FP
 shelter (for time being)

[+L] [+AC]
 [+lcn] [+LOC]

'Let's go take shelter under that tree.' (Huffman 1970:115)

- (6.53) səmnat qəndaet kəndaal tuənlee (S. Pou)
 flotsam float middle river

[+NM]
 [+OBJ]

[+AC]
 [+LOC]

'Flotsam is floating in the middle of the river.'

- (6.54) tik pɲɛk hou pii pɲɛk wiə (S. Pou)
 water eye flow from eye 3p (inferior)

[+NM]
 [+OBJ]

[+L] [+AC]
 [+src] [+LOC]

'Tears flowed from his (the child's) eyes.'

- (6.55) ...tuənlee Meekɔŋ... hou kat pii khaŋ-cəən tiw tboun
 river flow cut from side north to south

[+NM]
 [+OBJ]

[+L]
 [+src]

[+AC]
 [+LOC]

[+L]
 [+gol]

[+AC]
 [+LOC]

'The Mekong River flows (cutting) from north to south.'

(Huffman 1970:354)

Note that the LOCATIVES without Ps here are all locative relator nouns. This fact is not reflected in the case frame above because of the other set of O-L verbs which require that their LOCATIVES occur in the AC case form but do not require Nrs; this is the same set of O-L verbs which have corresponding coverbs.

6.2.1.3 AGENTIVE-LOCATIVE Verbs in Khmer

Some of the AGENTIVE-LOCATIVE (A-L) verbs in Khmer are:

yɔɔk	take, bring (as in numerous sentences above)
dək	transport, carry ((6.15) and (6.40) above)
tuul	carry on the head ((6.1), (6.6), and (6.8) above)
reək	carry on both ends of a shoulder pole
tiəñ	pull, drag along ((6.25) above)
læk	raise, lift up
bəndaet	float
bəŋhou	cause to flow, direct the flow of
bəñcəñ	expel, send out

daq	<i>put, place, deposit</i>
caq	<i>insert, inject</i>
dam	<i>plant</i>
stuun	<i>plant by pushing into ground, transplant</i>
saap	<i>sow, scatter</i>
pruuh	<i>sow, scatter, broadcast</i>
kəkaay	<i>dig, scratch about</i>
səsei	<i>write</i>

The LOCATIVES of all A-L verbs must occur with either an L case marker or a relator noun. No subclassification has been made on the basis of cooccurrence restrictions. The case frames of these verbs include the following features:

$$\left[\begin{array}{l} + [+NM, +AGT] \text{ } ___ \\ + \text{ } ___ [+AC, +OBJ] \\ + \text{ } ___ ([\text{}^{\left\{ \begin{array}{l} +L \\ +AC, +rel \end{array} \right\}}, +LOC]) \end{array} \right]$$

The verb *yock* 'take, bring', as well as many other A-L verbs, seems to require a verb, coverb, or adverb of direction after it, frequently *tiw* 'go away' or *mock* 'come hither', as in some of the example sentences cited above and in (6.56).

- (6.56) chəə nuh kee yɔɔk mɔɔk pii naa (Huffman 1970:366)

wood *that* *3p* *take* *hither* *from* *where*

[+AC] [+NM] [+Adv] [+L] [+AC]
[+OBJ] [+AGT] [+src] [+LOC]

'Where do they get the wood you mentioned?'

In all the sentences found, the only clear example of an A-L verb whose LOCATIVE has neither a P nor an Nr is sentence (6.57), with *daq* 'put' (cf. Thai *sà* 'put into').

- (6.57) kat pkaa klah yɔɔk tiw daq thou (Huffman 1970:259)

cut flower some take go put vase

+AC		+AC
+OBJ		+LOC

'Cut some flowers and put them in a vase.'

Other sentences with daq have a P or Nr or both, as in

- (6.58) daq qəywan nih niw knoŋ bentup phaŋ (Huffman
 put thing this in inside room as well 1970:158)

$$\begin{bmatrix} +AC \\ +OBJ \end{bmatrix} \quad \begin{bmatrix} +L \\ +lcn \end{bmatrix} \quad \begin{bmatrix} +AC \\ +LOC \end{bmatrix}$$

'Put these things in the room, please.'

The A-L verb *caq* must have *knəŋ* as its LOCATIVE noun, as in

- (6.59) *kñom caq mcul knəŋ sac* (S. Pou)
I insert needle inside flesh
 [+NM] [+AC] [+AC]
 [+AGT] [+OBJ] [+LOC]

'I stuck a needle in her skin.'

Caq cannot take an L case form: *tiw* means 'to' instead of 'into', *coul* 'into' is too strong here, as to 'bore into'. When the OBJECTIVE of *caq* is *tnam(-krun)* '(fever) medicine', *caq* cannot take a LOCATIVE but usually takes a BENEFACTIVE, as in (6.60).

- (6.60) *kñom niŋ caq tnam-krun cuun look* (Huffman 1970:291)
I Fut inject medicine-fever for Sir
 [+NM] [+AC] [+D] [+AC]
 [+AGT] [+OBJ] [+BEN]

'I'll give you an injection of fever-medicine.'

More example sentences with A-L verbs follow.

- (6.61) *tuuk nuh dək tnam mɔɔk pii Kəmpuəŋ-Caam*
boat that carry tobacco hither from
 [+NM] [+AC] [+Adv] [+L] [+AC]
 [+INS] [+OBJ] [+src] [+LOC]

'That boat is bringing tobacco from Kampong Cham.'

(Huffman 1970:183)

- (6.62) *koət rɛɛk tik cəñ tiw srae* (S. Pou)
3p pole water out to ricefield
carry
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]

'She carried the water to the ricefield.'

- (6.63) *kee yɔɔk dəmrəy tiəñ coul tuənlee ruəc bəndaet*
3p take elephant pull into river then float
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]
taam tik tiw rooŋ-qaa-chəə
along water to saw-mill
 [+L] [+AC] [+L] [+AC]
 [-ter] [+LOC] [+gol] [+LOC]

'They use elephants to pull (the wood) into the river, then float it by water to the saw-mills.'

(Huffman 1970:366)

- (6.64) kee trəw bəŋhou tik coul srae (Huffman 1970:340)
 3p must Caus-flow water into ricefield
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]

'They have to irrigate the ricefield.'

It is interesting to note, in regard to (6.63) and (6.64), that the OBJECTIVE-LOCATIVE verbs qəndaet 'float', hou 'flow' (see (6.53) and (6.54) above), and cəñ 'go out' become AGENTIVE-LOCATIVE verbs when they have the causative prefix, bəN.

- (6.65) baŋ cəŋ dam daəm-pkaa-kolaap...niw knoŋ suən
 older want plant rose bush in inside garden
 sib
 [+NM] [+AC] [+L] [+AC]
 [+OBJ] [+OBJ] [+lcn] [+LOC]

'I want to plant rose bushes in the garden.' Huffman 1970:258)

- (6.66) kee yɔɔk sɾəw-puuc mɔɔk saap knoŋ tnaal
 3p take rice seed hither sow inside seedbed
 [+NM] [+AC] [+Adv] [+AC]
 [+AGT] [+OBJ] [+LOC]

'They take seed-rice and sow it in the nursery-plot.'

(Huffman 1970:341)

- (6.67) soum səsei piəq nih niw ləə kdaa-khien
 please write word this in top blackboard
 [+AC] [+L] [+AC]
 [+OBJ] [+lcn] [+LOC]

'Please write this word on the blackboard.' (Huffman 1970:30)

6.2.1.4 AGENTIVE-DATIVE Verbs in Khmer

Some of the AGENTIVE-DATIVE (A-D) verbs in Khmer are:

qaoy	give (informal)
cuun	give (formal) (Sentence (6.35) above)
luəq	sell (sentence (6.36) above)
hoc	hand
pñæ	send
səsei	write (also an A-L [+surface] verb (see discussion of Vietnamese viết 'write', Sec. 3.3.5.2.1))
bəŋriən	teach
prap	tell, inform
sua	ask

The verb *qaoy* may occur with the direction adverb *mɔɔk*, as in

- (6.72) *look-kruu qaoy num nih mɔɔk kñom* (Jacob 1968:141)
teacher give cake this hither I
 [+NM] [+AC] [+Adv] [+AC]
 [+AGT] [+OBJ] [+DAT]

'The teacher gave me this cake.'

The analysis of *mɔɔk* in (6.72) as an adverb rather than a P is confirmed by S. Pou (personal communication), who states, in addition, that a more natural way to say this sentence is without *mɔɔk*, unless it is an imperative sentence, in which case it must have a directional adverb.

Other A-D verbs (e.g. *luəq* 'sell') can occur only with the D case form (with optional occurrence of a directional adverb).

- (6.73) *kñom luəq siəwphiw (tiw) qaoy Məla* (S. Pou)
I sell book away to
 [+NM] [+AC] [+Adv] [+D] [+AC]
 [+AGT] [+OBJ] [+DAT]

'I sold the book to Malaa.'

Others (with seeming spatial direction, such as *hoc* 'hand' and *pñəə* 'send') can occur with either [+D] (with optional directional adverb) or [+gol] case markers, as in (6.74), (6.75), and (6.76).

- (6.74) *hoc sabuu haey-niŋ kənsaen-cuut-kluən qaoy kñom phaŋ*
hand soap and towel to I as well
 [+AC] [+AC] [+D] [+AC]
 [+OBJ] [+OBJ] [+DAT]

'Please hand me the soap and a towel.' (Huffman 1970:149)

- (6.75) *səmbot nih pñəə tiw puəq-maaq kñom* (Huffman 1970:309)
letter this send to friend I
 [+AC] [+L] [+AC]
 [+OBJ] [+gol] [+DAT]

'This letter's going to my friend.'

- (6.76) *kñom səsei tiw maq-paa qaoy koət pñəə praq mɔɔk*
I write to ma-pa for 3p send money hither
 [+NM] [+L] [+AC] [+AC] [+AC] [+Adv]
 [+AGT] [+gol] [+DAT] [+OBJ] [+OBJ]

qaoy kñom
to I (Huffman 1970:308)

[+D] [+AC]
 [+DAT]

'I'm writing to my parents to have them send me some money.'

The verb *pñae* can take a LOCATIVE in place of its DATIVE.

- (6.77) *kñom caŋ pñae səmbot nih tiw srok-baraŋ* (Huffman 1970:308)
I want send letter this to France

[+NM]
[+OBJ]

[+AC]
[+OBJ]

[+L]
[+gol] [+AC]
[+LOC]

'I want to send this letter to France.'

If a DATIVE of *pñae* occurs in the AC or C case form, *pñae* has a different meaning: *'entrust'* instead of *'send'*, as in (6.78), and is likely a different verb from *pñae 'send'*. (This can also be true of Vietnamese *gửi 'send'* when its DATIVE is in the AC case form (Nguyen D-H 1973:15).)

- (6.78) *Səri pñae praq (niŋ) look-kruu* (S. Pou)
entrust money (with) teacher

[+NM]
[+AGT]

[+AC]
[+OBJ]

[+C]

[+AC]
[+DAT]

'Sarii entrusted the money to the teacher.'

(This is the only instance I have found so far of Khmer DATIVE occurring in the AC case form, except with *qaoy* and [+information] verbs.)

The verb *səsei 'write'* occurs with [+gol] case markers, as in (6.76) above; when it occurs with a [+D] case marker, [+D] marks BENEFACTIVE rather than DATIVE.

- (6.79) *Məla səsei səmbot qaoy puəq-maaq* (S. Pou)
write letter for friend

[+NM]
[+AGT]

[+AC]
[+OBJ]

[+D]

[+AC]
[+BEN]

'Malaa wrote a letter (to somebody else) for her friend.'

Most A-D-Goal verbs can take their DATIVES with the [+ter] preposition *dal 'reaching to'*, with a meaning of *'reaching clear to the end/top - bypassing channels, achieving success in reaching'*. With *luəq 'sell'*, it means *'even (unexpected achievement)'*, as in

- (6.80) *Sarun luəq kaŋ dal Məla* (S. Pou)
sell wheel reaching

[+NM]
[+AGT]

[+AC]
[+OBJ]

[+L]
[+ter]

[+AC]
[+DAT]

'Sarun sold a bicycle even to Malaa.'

Unlike Vietnamese, whose A-D verbs do not occur with the Source L case form, Khmer Source sub-CF occurs with certain A-D verbs. These verbs, as distinguished from the A-D-Goal verbs above, are A-D-Source verbs. Some of them are

<i>tiñ</i>	<i>buy</i>
<i>tætuel</i>	<i>receive, accept</i>
<i>kcay</i>	<i>borrow</i>
<i>tiem-tie</i>	<i>wrest away, obtain by bargaining</i>

and some uses of

<i>baan</i>	<i>obtain, get</i>
-------------	--------------------

Some example sentences follow.

- (6.81) *kee traw tiñ kriəŋ-laən pii baarəteeh* (Huffman 1970:372)

3p must buy auto parts from foreign countries

[+NM]	[+AC]	[+L]	[+AC]
[+OBJ]	[+OBJ]	[+src]	[+DAT]

'They have to import auto parts.'

- (6.82) *kee traw tətuel kaa-yuel-prəəm pii rəet-səphlə*

3p must receive approval from National Assembly

[+NM]	[+AC]	[+L]	[+AC]
[+OBJ]	[+OBJ]	[+src]	[+DAT]

'They must receive the approval of the National Assembly.'

(Huffman 1970:378)

- (6.83) *koət kcay məkuu pii səri* (S. Pou)

3p borrow one pair from

[+NM]	[+AC]	[+L]	[+AC]
[+AGT]	[+OBJ]	[+src]	[+DAT]

'She borrowed a pair from Sari.'

- (6.84) *preəh-baat Nərootdam Siihanuq...tiem-tie*

king obtain

[+NM]
[+AGT]

qaekkəriac ciət pii prəteeh-baraŋ...

independence nation from France

[+AC]	[+L]	[+AC]
[+OBJ]	[+src]	[+DAT]

'King Norodom Sihanouk obtained national independence from France.'

(Huffman 1970:376)

- (6.85) *koət baan sətraa pii (ksae) pii miə (koət)*

3p obtain manuscript two string from young 3p
sib of
parent

[+NM]	[+AC]	[+L]	[+AC]
[+AGT]	[+OBJ]	[+src]	[+DAT]

'She got two manuscripts from her uncle.' (S. Pou)

The A-D-Source verb *tĩñ* 'buy' can occur with the goal D case form when it marks BENEFACTIVE.

(6.86) *qəwpuk tĩñ siəwphɨw qaoy kñom* (Jacob 1968:141)

father buy book for I
 [+NM] [+AC] [+D] [+AC]
 [+AGT] [+OBJ] [+BEN]

'Father buys books for (on behalf of) me.'

6.2.2 THAI

6.2.2.1 Coverbs, Prepositions, and Relator Nouns

6.2.2.1.1 Thai Coverbs

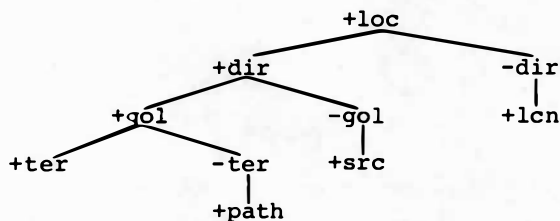
"The use of co-verbs or derived prepositions is quite common in Thai" (Kullavanijaya 1974:83). The following list, drawn from the sources given in Sec. 1.4.3 above and from consultation with Pranee Kullavanijaya, includes those Thai coverbs which happen to roughly correspond in meaning and function to the coverbs found in both Vietnamese and Khmer. I have marked each coverb with case form (CF) features, and given the meaning of the corresponding verb.

PREPOSITION			VERB
yùu	<i>in, at</i>	[+L,+lcn]	<i>be in/at, stay</i>
càak	<i>from</i>	[+L,+src]	<i>leave</i>
pay	<i>to (away)</i>	[+L,+gol]	<i>go</i>
maa	<i>to (hither)</i>	[+L,+gol]	<i>come</i>
klàp	<i>back (to)</i>	[+L,+gol]	<i>go back</i>
khâam	<i>across</i>	[+L,+gol,-ter]	<i>go across</i>
khâw	<i>into</i>	[+L,+gol,-ter]	<i>go in</i>
khîn	<i>up</i>	[+L,+gol,-ter]	<i>go up</i>
lɔŋ	<i>down</i>	[+L,+gol,-ter]	<i>go down</i>
taam	<i>following, along</i>	[+L,+gol,-ter]	<i>follow</i>
thɨŋ	<i>reaching to</i>	[+L,+ter]	<i>arrive at, reach</i>
hây	<i>to, for</i>	[+D]	<i>give</i>

Kullavanijaya (1974:83) also gives *wâa* 'saying; say' as a coverb. *Wâa* as a preposition requires a quotation in the following noun slot. This "derived quote noun" has an OBJECTIVE case relation which occurs only with [+information] verbs. The P *wâa* marks the R (Range) case form on quote nouns. (See Kullavanijaya 1974:216,218.) This special OBJECTIVE case relation and the R case form are outside the range of this study, and *wâa* will not be included in the discussion of Thai coverbs.

(6.87) ...phûut sây nâa (Haas 1964:553)
 speak into face
 'say (it) right to one's face'

As noted for Khmer, most of the coverbs are [+gol] case markers. However, in Thai, many of the [+gol] coverbs cannot occur marking Terminus and so are marked [-ter] in the lexicon. The Goal sub-CF has been defined in Sec. 3.2.2.4.3 as marking "the path along which or goal toward which the action of the verb is directed; that is, the noun associated with a Goal sub-CF names the path or intended terminal point of the action of the verb, never the point of origin". The [-ter] coverbs are marked [+path] by subcategorisation and redundancy rules which give the following locative feature tree (from Sec. 3.3.4.1).



Like Khmer cəñ 'go out' (Sec. 6.2.1.1.1 above), Thai ?əək 'go out' cannot occur as a preposition and so is not included in the list of co-verbs. Sentence (6.89), with ?əək occurring as an adverb with the verb hàap, which requires a preposition with its Inner LOCATIVE, is grammatical; (6.90) is ungrammatical, since ?əək cannot be P.

(6.89) Pùk hàap náam ʔòɔk pay naa (PK)
pole carry water out to field
 [+Adv][+P]
'Pook carried the water out to the field.'

- (6.90) * Pùk hàap náam ʔòok naa
'Pook carried the water out to the field.'

The prepositions marked [-ter] in the list above cannot mark a LOCATIVE noun which is interpreted as a terminal goal, but must indicate movement through space toward a goal. This fact is shown in (6.91) and (6.92), using *khâam* 'across' as an example; appropriate features are marked.

- (6.91) Pùk hàap náam khâam saphaan lǎaw (PK)
 carry water across bridge already
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+L] [+LOC]
 [+path]

'Pook carried the water across the bridge.'

- (6.92) * Pùk hàap náam khâam faŋ nóon
 carry water across bank over there
'Pook carried the water across to the other bank.'

These [-ter] words can occur as directional adverbs in sentences whose terminal goals are marked with prepositions, as in (6.93) and other sentences below.

- (6.93) Pùk hàap náam khâam pay faŋ nóon (PK)
 carry water across to bank over there
 [+NM] [+AC] [+Adv] [+P] [+AC]
 [+AGT] [+OBJ] [+L] [+LOC]
 [+gol]

'Pook carried the water across to the other bank.'

The problems of *taam* 'following, follow' are much the same as those of Khmer *taam* (see discussion in Sec. 6.2.1.1.1 and discussion of Vietnamese *theo* in Sec. 5.1.2). *Taam* can occur as a [+L,-ter] case marker if it occurs with a directional adverb, (6.94), or as a [+lcn] case marker, (6.95).

- (6.94) ...wɪŋ pay taam thanōn (Noss 1964:150)
 run away along street
 [+Adv] [+P] [+AC]
 [+L] [+LOC]
 [+path]

'run along the street'

- (6.95) ...wɪŋ taam thanōn (PK)
 [+L] [+AC]
 [+lcn] [+LOC]

'run in the area of the street'

However, as a verb it can take a mobile OBJECTIVE, (6.96), but no inner LOCATIVE unless the LOCATIVE is followed by a Goal verb, as in (6.97).

- (6.96) Arunee taam $\left\{ \begin{array}{l} \text{rót nán} \\ \text{car that} \\ \text{Pùk} \end{array} \right\}$ (PK)
 follow
 [+V] [+AC]
 [+OBJ]

'Arunee followed {that car / Pook}.'

- (6.97) Arunee taam mǎnám pay con phóph thalee (PK)
 follow river go until meet sea
 [+V] [+AC] [+V] [+V]
 [+LOC]

'Arunee followed the river until she came to the sea.'

These problems will not be investigated in this study.

Kullavanijaya (1974:51,66,85ff) analyses hây as a [+B] preposition rather than as a [+D] preposition. She does this on the bases of the inherent semantic benefactive marking on the word hây and her analysis of the case relations occurring with the verb hây. That is, she considers hây to be an AGENTIVE-DATIVE (A-D) verb (1974:128; also see Sec. 6.2.2.4 below) which must take its DATIVE in the C case form, as in

- (6.98) chǎn hây nǣn sǐp bàat kàp Pùk mǎwanníi
 I give money ten baht with yesterday
 [+NM] [+AC] [+C] [+AC] [+AC]
 [+AGT] [+OBJ] [+DAT] [+TIM]

'I gave ten baht to Pook yesterday.' (Kullavanijaya 1974:91)

When the recipient of the verb hây occurs in the AC case form, she considers that noun to have the BENEFACTIVE case relation, as shown in

- (6.99) phǎo hây nǣn Pùk (Kullavanijaya 1974:51)
 father give money
 [+NM] [+AC] [+AC]
 [+AGT] [+OBJ] [+BEN]

'Father gave Pook (some) money.'

Hây in (6.100) can be considered to be a [+B] preposition with the meaning given.

- (6.100) khǎw sǒn khǎo hây Pùk (PK)
 3p send thing for
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+B] [+BEN]

'She sent the things for (in place of) Pook.'

If Pùk is the recipient, as in (6.101), *hây* may be an embedded verb.

- (6.101) khăw sòn khōn hây Pùk (PK)
 3p send, thing give
 hand
- [+NM] [+AC] [+V] [+AC]
 [+AGT] [+OBJ] [+BEN]

'She passed the things and gave them to Pook.'

DATIVE for A-D verbs can be marked with *kàp*, as in (6.102), not with *hây*.

- (6.102) khăw sòn khōn kàp Pùk (PK)
 3p send thing with
- [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+C] [+DAT]

'She sent the things to Pook.'

In other words, according to Kullavanijaya, A-D verbs may take their DATIVES in the C case form (1974:49). A few of them can occur with the embedded or coordinate verb *hây* instead of having a DATIVE. Thus, in her analysis, *hây* is not a [+D] preposition. She does state that the occurrence of *hây* with *sōn* 'teach' is a problem because *sōn* is an A-D verb, and in sentences like (6.103) she feels that *hây* is not an embedded verb meaning 'give'.

- (6.103) Pùk sōn naŋsɿɿ hây Aacin (PK)
 teach book to, for

'She teaches Aachin.' / 'She teaches in place of Aachin.'

In this study, *hây* will be considered to be a [+D] preposition, partly to parallel the analysis in Vietnamese and Khmer, but also because of the definition in this study of DATIVE case relation as the recipient or goal of the action of the verb and the analysis in this study of *hây* being one of the A-D verbs which can take its DATIVE in the AC case form (see Sec. 6.2.2.4 below). That is, Pùk in (6.99) and in (6.101) when *hây* is a sequential verb are considered to be marked [+AC,+DAT]. Pranee Kullavanijaya (personal communication) feels that recipient nouns of *hây* have particular benefactive marking rather than the neutral marking of the recipient nouns of other A-D verbs. The claim made here is that, to account for this benefactive marking, *hây* has an inherent semantic feature [+beneficial] which marks its [+AC,+DAT] nouns [+beneficiary] as well as [+goal]. When *hây* in (6.101) is not considered to be a verb in sequence, it and *hây* in (6.103) are analysed as [+D] prepositions which can mark the DATIVE ('to') case relation with a few A-D verbs, such as *sòn* and *sōn*, and mark the BENEFACTIVE ('for') case relation with most verbs.

Following are example sentences with the locative words from the list above. Relevant categories and case features are postulated, and occurrences of the above words are underlined.

- (6.104) phôm yùu thîi thanôn Sùkhūmwít (Brown 1967:127)

I be in place at road

[+NM] [+V] [+AC]
[+OBJ] [+LOC]

'I live on Sukhumvit Road.'

- (6.105) welaa nán khăw yaŋ yùu nay Krunthêep (Noss 1964:97)
time that 3p still be in inside Bangkok

[+AC] [+NM] [+V] [+AC]
[+TIM] [+OBJ] [+LOC]

'At that time, he was still in Bangkok.'

- (6.106) khăw tham ɲaan yùu thîi Krunthêep (PK)
3p do work in place at Bangkok

[+NM] [+AC] [+P] [+AC]
[+AGT] [+OBJ] [+L] [+LOC]
[+lcn]

'He works in Bangkok.'

Thai is the only one of the three languages whose Source case marker has a corresponding main verb. Following are examples with *càak* 'from' as a verb, (6.107), and as a coverb, (6.108).

- (6.107) Dæŋ càak bân maa lăay pii lăaw
leave home hither to several year already

[+NM] [+V] [+AC] [+P] [+AC]
[+OBJ] [+LOC] [+L] [+TIM]
[+gol]

'She left home several years ago.' (Kullavanijaya 1974:62)

- (6.108) khăw thŏn klâa câak naa (PK)
3p uproot seedling from field

[+NM] [+AC] [+P] [+AC]
[+AGT] [+OBJ] [+L] [+LOC]
[+src]

'She's uprooting the seedlings from the field.'

As in Vietnamese (Sec. 5.1.3) and Khmer (Sec. 6.2.1.1.1), the Goal words in the list above, except for *klàp* 'back to, go back', can occur as postverbal adverbs to designate direction of the action of the verb. Examples of this usage are included in the example sentences with these words.

- (6.109) Dæən sən nɔŋ pay taʔlàat
 order brother go market

[+NM] [+AC] [+V] [+AC]
 [+AGT] [+OBJ] [+LOC]

'Dang told his brother to go to the market.'

- (6.110) khǎw sən lûuk pay Ameerikaa (Brown 1967:185)
 3p send child to

[+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+L] [+LOC]
 [+gol]

'He sent his son to America.'

- (6.111) khǎw dæən pay bâan thúk wan (PK)
 3p walk to house every day

[+NM] [+P] [+AC] [+AC]
 [+OBJ] [+L] [+LOC] [+TIM]
 [+gol]

'She walks to the house every day.'

- (6.112) khǎw ʔaw nanʃi pay (Brown 1967:185)
 3p take book away

[+NM] [+AC] [+Adv]
 [+AGT] [+OBJ]

'He took a book with him.'

- (6.113) ...maa thaən mæ̀nám (Noss 1964:150)
 come way river

[+V] [+AC]
 [+LOC]

'came by way of the river'

- (6.114) ʔaw khɔŋ maa thîi bâan (PK)
 take thing to place at house
 (hither)

[+AC] [+P] [+AC]
 [+OBJ] [+L] [+LOC]
 [+gol]

'Bring the things home.'

- (6.115) chǎn ʔaw burli maa (Brown 1967:185)
 I take cigarette hither

[+NM] [+AC] [+Adv]
 [+AGT] [+OBJ]

'I brought cigarettes with me.' (Cf. (6.112).)

- (6.116) phǒm yàak klàp m+əŋ Thay lǎəw (Panupong 1970:30)
 I want return country already

[+NM] [+V] [+AC]
 [+OBJ] [+LOC]

'I'd like to go back to Thailand.'

- (6.117) khǎw sǒŋ khǒŋ klàp Krunthēep (PK)
 3p send thing back to Bangkok

[+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+L] [+LOC]
 [+gol]

'They sent their things back to Bangkok.'

- (6.118) khǎw dəən klàp bāan thúk wān (PK)
 3p walk back to house every day

[+NM] [+P] [+AC] [+AC]
 [+OBJ] [+L] [+LOC] [+TIM]
 [+gol]

'She walks home every day.' (Cf. (6.111).)

- (6.119) khǎw khâam thanǒn pay bāan Pùk (PK)
 3p cross street to house

[+NM] [+V] [+AC] [+P] [+AC]
 [+OBJ] [+LOC] [+L] [+LOC]
 [+gol]

'She crossed the street to Pook's house.'

- (6.120) Wanthanaa wāy-nám khâam khǒŋ (PK)
 swim across canal

[+NM] [+P] [+AC]
 [+OBJ] [+L] [+LOC]
 [+gol]

'Wanthanaa swam across the canal.'

For an example of khâam as an adverb, see sentence (6.93) above.

- (6.121) khwan kamlaŋ khâw bāan (Panupong 1970:121)
 smoke Prog. enter house

[+NM] [+V] [+AC]
 [+OBJ] [+LOC]

'The smoke's getting into the house.'

Unlike the situation in Vietnamese, the Thai P 'into' (khâw) cannot be glossed 'onto'. That is, Vietnamese vào 'into, onto' has the feature [+entering] and thus, through subcategorisation and redundancy rules, can mark either [+surface] or [+enclosed] on the case form of LOCATIVE

nouns (see Sec. 3.3.5.2.1 above). On the other hand, Thai *khâw* has the features [+entering, -surface]; that is, it can be only [+enclosed] and so imposes the interpretation of [+interior] on its LOCATIVE noun. Compare (6.122), which is grammatical, with (6.123), which is not, unless it should mean 'pour water INTO (hollow) plants'.

- (6.122) Arunee thee náam *khâw* cæakan (PK)
pour water into vase

[+NM +AGT]	[+AC +OBJ]	[+P +L +gol +enclosed +__ [+interior]]	[+AC +LOC]
---------------	---------------	--	---------------

'Arunee poured the water into the vase.'

- (6.123) Arunee thee náam *khâw* tôn máay (PK)
CL plant

*[+surface]

'Arunee poured water on the plants.'

- (6.124) dæen *khâw* maa klây-klây nòy ná? (Noss 1964:
walk entering hither close a little O.K.? 184; and
[+Adv] [+Adv] PK)

'Walk right up close, will you?'

- (6.125) *khâw* *khîn* hōckhōy níi láaw (PK)
3p go up tower this already

[+NM +OBJ]	[+V]	[+AC +LOC]
---------------	------	---------------

'He's already gone up this tower.'

- (6.126) *khâw* ?aw *khâaw* *khîn* roongsīi (PK)
3p take rice up mill

[+NM +AGT]	[+AC +OBJ]	[+P +L +gol]	[+AC +LOC]
---------------	---------------	--------------------	---------------

'They're taking the rice up (the stairs of) the mill.'

- (6.127) *khâw* yìp naŋsīi *khîn* maa (Noss 1964:184)
3p pick up book upward hither

[+NM +AGT]	[+AC +OBJ]	[+Adv]	[+Adv]
---------------	---------------	--------	--------

'He lifted up the books.'

- (6.128) khăw loŋ khăw (PK)
 3p go down mountain
 [+NM] [+V] [+AC]
 [+OBJ] [+LOC]

'She went down the mountain.'

- (6.129) khăw hỏp phâa loŋ khăw (PK)
 3p carry clothes down hill
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+L] [+LOC]
 [+gol]

'She carried the clothes down the hill.'

As discussed above, loŋ is one of the [-ter] prepositions which can mark the Path of a Goal but not the Terminus of a Goal. In (6.130), loŋ is a directional 'path' adverb and pay is the P marking the Terminus of the verb hỏp.

- (6.130) khăw hỏp phâa loŋ pay (thii) mắnám (PK)
 3p carry clothes down to place at river
 [+NM] [+AC] [+Adv] [+P] [+AC]
 [+AGT] [+OBJ] [+L] [+LOC]
 [+gol]

'She carried the clothes down to the river.'

- (6.131) Pủk cầ? mây thỉŋ ?Ameerikaa con thỉŋ wansủk (PK)
 Fut not arrive until reaching Friday
 [+NM] [+V] [+AC] [+P] [+AC]
 [+OBJ] [+LOC] [+L] [+TIM]
 [+ter]

'Pook won't arrive in America until Friday.'

- (6.132) ...?ỏk pay thỉŋ klaan mắnám (Noss 1964:149)
 go out away reaching middle river
 [+Adv] [+P] [+AC]
 [+L] [+LOC]
 [+ter]

'went out into the middle of the river'

As a [+L,+ter] preposition, thỉŋ can mark not only LOCATIVE and TIME case relations but also DATIVE, as in (6.133), and what, for the time being, is analysed as OBJECTIVE, as in (6.134) (cf. Vietnamese, Sec. 3.2.2.4.4).

(6.133) chǎn cà? khǎn còtmāay thǎn thəə (PK)

I Fut write letter reaching you
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+L] [+DAT]
 [+ter]

'I'll write a letter to you.'

(6.134) Arunee phūut thǎn Pùk kàp chǎn (PK)

speak reaching with I
 [+NM] [+P] [+AC] [+P] [+AC]
 [+AGT] [+L] [+OBJ] [+C] [+DAT]
 [+ter]

'Arunee spoke about Pook to me.'

(See the following section regarding the preposition kàp.)

6.2.2.1.2 Thai Prepositions

The underived prepositions in common use in Thai which are of interest in this study are the following:

təə from, since [+L,+src]
 kəə to, toward [+D]
 kàp (kà?) with, in relation to [+C,+__[+COM,+DAT,+LOC]]

As shown, kàp can occur with COMITATIVE, DATIVE, and sometimes a LOCATIVE (see (6.141) below); this LOCATIVE usage of kàp has not been explored in this study, and Kullavanijaya 1974 does not refer to it.

Examples of these prepositions in sentences follow, with the underived prepositions underlined as well as the verbs and coverbs from the list in the preceding section.

(6.135) daŋ khǎn təə lǎŋ pratuu (Noss 1964:149)

become rising from back door
 loud

[+Adv] [+P] [+AC]
 [+L] [+LOC]
 [+src]

'There was a noise from behind the door.'

(6.136) ...?òk dəən-thaəŋ təə cháaw mǐt (Noss 1964:149)

go out travel from morning dark

[+P] [+AC]
 [+L] [+TIM]
 [+src]

'started travelling in the early morning'

- (6.137) *chủay càək sũucibàt kàə khàək nòy ná?*
help distribute programme to guest little O.K.?
 [+AC] [+P] [+AC]
 [+OBJ] [+D] [+DAT]

'Will you please help distribute the programmes to our guests?'

(Panupong 1970:25;
and PK)

- (6.138) *Dæŋ bɔ̀ək khwaamláp kàp Pùk*
tell secret with
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+C] [+DAT]

(Kullavanijaya
1974:39)

'Dang told his secret to Pook.'

Kàp can, depending on the verb, mark either a Goal DATIVE, as in (6.138), or a Source DATIVE, as in (6.139), which is ambiguous since sɛi 'buy' allows Pùk to also be COMITATIVE.

- (6.139) *Dæŋ sɛi sɛi tua níi kàp Pùk*
buy shirt Cl this with
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+C] [+DAT]
 [+COM]

(Kullavanijaya
1974:77)

'Dang bought this shirt {from, with} Pook.'

- (6.140) *pay kàp phõm dii kwàa*
go with I good more
 [+V] [+P] [+AC]
 [+C] [+COM]

(Noss 1964:150)

'To go with me is better.'

- (6.141) *khɔ̀ɔŋ nán tɔ̀ŋ waəŋ kà? dín*
thing that must put with earth
 [+AC] [+P] [+AC]
 [+OBJ] [+C] [+LOC]

(Haas 1964:26)

'Those things have to be set on the ground.'

6.2.2.1.3 Thai Locative Relator Nouns

A list of locative relator nouns (Nr), which Noss (1964:147) calls nay-class prepositions, follows. (See Sec. 3.2.3 above for discussion of Nr.)

nay	inside
nɔ̀ək	outside
bon	top, surface, upper part

lâaŋ	<i>bottom, underneath, lower part</i>
nĩa	<i>above</i>
tây	<i>below</i>
nâa	<i>front, face</i>
lăŋ	<i>back</i>
khâaŋ	<i>side</i>
klaaŋ	<i>middle</i>

I add to Noss's list the following nouns, which frequently occur as relator nouns and the first four of which Noss considers to be caak-class prepositions (pp. 148-51).

thii	<i>place at</i>
thaaŋ	<i>direction, way</i>
thăaw	<i>vicinity</i>
khăa	<i>extent, point</i>
bĩaŋ	<i>side, part</i>
phaay	<i>scope</i>
toon	<i>part</i>

Panupong (1970:162-3) also lists some of these words as prepositions. Kullavanijaya (1974:88ff) refers to this type of noun as a "noun auxiliary" and says that such a noun is followed by another noun and is used to mark case - to "satisfy the selectional requirements of a verb for the locative case relation".

Nrs have the features [+place,+relation].

Some of the Nrs have cooccurrence restrictions with respect to co-verbs. For example, *nay* has the feature [+interior]. This feature allows *nay* to occur as the LOCATIVE noun of an NP with a V or a P which requires or allows the feature [+interior] on its LOCATIVE noun. There are only two such [+L] Ps in Thai; they are *yùu* 'in' and *khâw* 'into'. For this reason, it is hypothesised here that when *khâw* occurs with *nay* it is a P, as in (6.142), although *khâw* could be interpreted as an adverb (cf. (6.143)).

(6.142)	khăw	kèp	khăwŋ	khâw	nay	línchák	(PK)
	3p	keep	thing	into	inside	drawer	
	[+NM +AGT]	[+AC +OBJ]	[+P +L +gol]	[+Nr +AC +LOC +interior]			

'He put his things in the drawer.'

If *khâw* is omitted in (6.142), the sentence means 'he keeps his things in the drawer'.

It is further hypothesised that Ps that do not have the feature [+__[+interior]] cannot occur with *nay*. The following rules can account for these cooccurrences. (See discussions of *khâu* in Sec. 6.2.2.1.1 and of Vietnamese *vào* 'into, onto' in Sec. 3.3.5.2.1 regarding the feature [+entering].)

1. [+entering] → [±surface]
2. [-surface] → [+enclosed]
3. [+enclosed] → [+__[+interior]]
4. $\begin{bmatrix} +P \\ +goal \end{bmatrix}$ → $\begin{bmatrix} \pm terminus \end{bmatrix}$ (See Sec. 3.3.4.1 for rules regarding [+goal].)
5. $\begin{bmatrix} +P \\ \pm terminus \end{bmatrix}$ → $\begin{bmatrix} - [+interior] \\ + [-] [+locus] \end{bmatrix}$

The P *khâu* is a [+goal] P, but it has in its lexical entry the feature [+entering, -surface], which implies rule 3 and therefore blocks the application of part of rule 5 to *khâu*. The [+goal] P *pay* 'to', on the other hand, does not have the features [+entering] or [+enclosed] and rule 5 applies, so that the P *pay* cannot occur with the Nr *nay*. However, *pay* can occur as an adverb with *nay*, as in

(6.143) *khâu kèp khốu khâu pay nay línchák* (PK)
 3p keep thing into away inside drawer
 [+Adv][+Adv]

'He put his things away in the drawer.'

where *khâu* modifies the action of 'putting' and *pay* modifies the action of 'putting things into' and is not a P (PK, personal communication).

Thii, on the other hand, has the feature [+locus] and no feature [+interior]. *Pay* occurs as a P with *thii*, as in (6.144), where *pay* occurs obligatorily. (Also see (6.114) above, with *maa* as a P.)

(6.144) *khâu khwân lûuk bôn pay thii Arunee* (PK)
 3p throw Cl ball to place at
 $\begin{bmatrix} +NM \\ +AGT \end{bmatrix}$ $\begin{bmatrix} +AC \\ +OBJ \end{bmatrix}$ $\begin{bmatrix} +P \\ +L \\ +gol \end{bmatrix}$ $\begin{bmatrix} +Nr \\ +AC \\ +LOC \\ +locus \end{bmatrix}$

'She threw the ball to Arunee.'

Thus, *thii* can be the Goal of a directional verb; *nay* in general cannot (see remarks regarding the verb *sây* in Sec. 6.2.2.3 below). *Thii naa* in (6.145) is an inner LOCATIVE of the verb *wân* (see Sec. 3.3.4.1), *nay naa* in (6.146) is an outer LOCATIVE.

- (6.145) khăw wàan khâaw thi naa (PK)
 3p sow rice place at field
 [+NM] [+AC] [+AC]
 [+AGT] [+OBJ] [+LOC]

'She's sowing rice in the field (planting the field).'

- (6.146) khăw wàan khâaw nay naa (PK)
 inside

'She's in the field sowing rice.'

The case form requirements for the LOCATIVES of AGENTIVE-LOCATIVE-Goal verbs in Thai will have to be refined:

[+___([+L
 +AC,+rel,-interior],+LOC)]].

However, Vietnamese *trong* 'inside', which has the feature [+interior], can be the LOCATIVE noun of some directional verbs (e.g. sentence (3.132) in Sec. 3.3.5.2.1), so that the rule will have to be different for the different languages or have to be further refined to account for the facts in each language and still make a general statement regarding inner LOCATIVES. The selectional restrictions for such occurrences are very complex and will not be further investigated in this study.

There are Nrs in many of the example sentences above: (6.104), (6.105), (6.106), (6.113), (6.114), (6.130), (6.132), (6.135).

6.2.2.2 OBJECTIVE-LOCATIVE Verbs in Thai

Besides *yùu* 'be in' and the verbs of direction listed above which have corresponding coverbs, and besides *ʔòk* 'go out' (discussion above and (6.132)), other OBJECTIVE-LOCATIVE (O-L) verbs in Thai include:

nâŋ	sit
yîŋ	stand
phák	stay
yùt	stop
còt	be parked (also A-L verb)
lăw	turn
dəən	walk ((6.111), (6.118), (6.124) above)
wîŋ	run ((6.94) and (6.95) above)
lân	go, run (for vehicles)
wâay-nám	swim ((6.120) above)
bîn	fly
hòklóm	fall (down) (of persons)
tòk	fall (through space)

- (6.152) Wanthanaa wâay-náam nay khlɔɔŋ (PK)
 swim inside canal
 [+NM] [+AC]
 [+OBJ] [+LOC]

'Wanthanaa's swimming in the canal.' Cf. (6.120)

(6.153), from Kullavanijaya (1974:29, and personal communication), has both an inner LOCATIVE, *bon kraday*, which immediately follows the verb, and an outer LOCATIVE, which follows the inner LOCATIVE.

- (6.153) waanfi nɔɔŋ hòklóm bon kraday thîi ta?làat
 yesterday sister fall top stairs place at market
 [+AC] [+NM] [+AC] [+AC]
 [+TIM] [+OBJ] [+LOC] [+LOC]

'Yesterday, at the market, sister fell down on the steps.'

- (6.154) pàak-kaa tòk loŋ pay thîi phîin lăay hōn
 pen fall down to place at floor many instance
 [+NM] [+Adv] [+L] [+AC] (PK)
 [+OBJ] [+gol] [+LOC]

'The pen has fallen on the floor many times.'

- (6.155) mǎanám nîi lăy loŋ thalee (PK)
 river this flow down sea
 [+NM] [+L] [+AC]
 [+OBJ] [+gol] [+LOC]

'This river flows down to the sea.'

The O-L verb *lùt* takes a Source LOCATIVE, as in (6.156).

- (6.156) dɪnsɔɔ lùt pay càak mɨi (Noss 1964:149)
 pencil come loose away from hand
 [+NM] [+Adv] [+L] [+AC]
 [+OBJ] [+src] [+LOC]

'The pencil slipped out of his hand.'

6.2.2.3 AGENTIVE-LOCATIVE Verbs in Thai

Some of the AGENTIVE-LOCATIVE (A-L) verbs in Thai are

ʔaw	take, bring ((6.112), (6.114), (6.115), (6.126) above)
kèp	keep, put away ((6.142), (6.143) above)
wáy	keep
sày	put into
təəm	add, put in

- (6.157) khon təəm nám-man rót (Panupong 1970:12)
 person put in petrol car
 [+NM] [+AC] [+AC]
 [+AGT] [+OBJ] [+LOC]

'A man's filling the car with petrol.'

Further, *sày* and *təəm* have the feature [+__[+interior]] and, unlike most other A-L verbs, can have the *Nr* *nay* as their LOCATIVE noun, as in (6.158). (See discussion regarding restrictions on *Nrs* in Sec. 6.2.2.1.3 above.)

- (6.158) chǎn sày nám nay khuat nán (PK)
 I put water inside bottle that
 [+NM] [+AC] [+AC]
 [+AGT] [+OBJ] [+LOC]
 [+rel]

'I put water in that bottle.'

Two *Nrs* can occur together, and, in (6.159), *thīi* is essential to mark the goal of the A-L verb *cəə*. Without *thīi*, the [+LOC] phrase is an outer LOCATIVE.

- (6.159) thīi nay rót-mee khon cəə satəŋ bəy (Panupong 1970:105)
 place inside bus person find money often
 [+AC] [+NM] [+AC]
 [+LOC] [+AGT] [+OBJ]
 [+rel]

'People often find some money on the bus.'

As discussed above in Sec. 6.2.2.1.1, Thai *khāw* 'into' cannot have the meaning 'onto' (cf. Vietnamese *vào* 'into, onto'). To express this meaning for A-L verbs which have the feature [+__[+surface]], the *Nr* *bon* 'top, surface' is used, as in (6.160) and (6.161).

- (6.160) khray yàa waəŋ khɔŋ bon tó? sɔŋ tua nán ná?
 who don't put thing top table two Cl that O.K.?
 [+NM] [+AC] [+AC]
 [+AGT] [+OBJ] [+LOC]
 [+rel]

(Panupong 1970:38)

'Don't anybody put anything on those two tables, please.'

- (6.161) yàa maa khǎn bon kradaan-dam (Noss 1964:135)
 don't come write top blackboard
 [+AC]
 [+LOC]
 [+rel]

'Don't write on this (our) blackboard.'

A-L-Source verbs require a [+src] P.

(6.162) yàa pìəy nũu tua nán càak mɪɪ (PK)
 don't release mouse Cl that from hand
 [+AC] [+L] [+AC]
 [+OBJ] [+src] [+LOC]

'Don't let that mouse go from your hand.'

6.2.2.4 AGENTIVE-DATIVE Verbs in Thai

Some of the AGENTIVE-DATIVE (A-D) verbs in Thai are

hây give ((6.98) and (6.99) above)
 càək distribute ((6.137) above)
 khăay sell
 khiɪn return
 sən send, hand ((6.100-102) above)
 yɪɪn hand
 sɔɔn teach ((6.103) above)
 khɪan write ((6.133) above)
 (also an AGENTIVE-LOCATIVE [+surface] verb
 (see (6.161) above and discussion of
 Vietnamese viết 'write', Sec. 3.3.5.2.1))
 phûut speak, say
 bòək tell, command
 lăw tell, inform, narrate
 thăam ask
 sák question
 bon complain
 ?ùat show

and the A-D-Source verbs

sɪɪ buy ((6.139) above)
 yɪɪm borrow
 yìp pick up

Thai can mark non-subject Goal DATIVE with one of two D case forms, one a coverb (see discussion above regarding hây as D or B case form), and one an underived preposition, kăə. In addition, unlike either Khmer or Vietnamese, Thai frequently marks DATIVE with the C case form kàp, usually reduced in colloquial speech to kà? (Kullavanijaya 1974:73). In general, the case frames for Thai A-D verbs include the following features.

- (6.165) khăw sòn dɪnsɔ̌ hây lûuk (Brown 1967:185)
 3p hand pencil to offspring
 [+NM] [+AC] [+D] [+AC]
 [+AGT] [+OBJ] [+DAT]

'He passed his child a pencil.'

The verb sòn can take the [+L,+ter] case marker th̃ỹ with its DATIVE (as can kh̃an 'write', (6.133) above), as in (6.166).

- (6.166) Arunee cà? sòn kh̃ɔ̌ th̃ỹ thəə (PK)
 Fut send thing reaching 2p
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+ter] [+DAT]

'Arunee will send the things to you.'

Of the above list of A-D-Goal verbs, only sòn can have a LOCATIVE in place of its DATIVE, as shown in (6.110) and (6.117) above and (6.167). (Cf. Vietnamese, most of whose A-D-Goal verbs can have a Goal LOCATIVE (Sec. 3.3.5.1.1).) The preposition th̃ỹ cannot occur with the LOCATIVE of sòn.

- (6.167) Arunee cà? sòn kh̃ɔ̌ klàp Krunthəep (PK)
 Fut send thing back to Bangkok
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+gol] [+LOC]

'Arunee will send the things back to Bangkok.'

- (6.168) ỹĩn hây phanák-naan (Noss 1964:159)
 hand to clerk
 [+D] [+AC]
 [+DAT]

'Hand it to the clerk.'

- (6.169) kamlan cà? s̃ɔ̌ naŋs̃ĩ (kəə) dək (Panupong 1970:25;
 Prog Fut teach book to child and PK)
 [+AC] [+D] [+AC]
 [+OBJ] [+DAT]

'I was going to give the boy a lesson.'

- (6.170) kàp khruu Dəəŋ klâa lăw (Kullavanijaya
 with teacher dare tell 1974:30)
 [+C] [+AC] [+NM]
 [+DAT] [+OBJ]

'Only to the teacher will Dang dare to tell (the story).'

- (6.171) panhăa phûak nîi nákrîan chôp thăam chăñ (Panupong 1970:17)
 problem group this student like ask I
 [+AC] [+NM] [+AC]
 [+OBJ] [+DAT]

'Pupils tend to ask me about these problems.'

- (6.172) sák ?aray náa ?îik lâ? (Panupong 1970:25)
 question what aunt again FP
 [+AC] [+AC]
 [+OBJ] [+DAT]

'What are you questioning Auntie about this time?'

Like Khmer but unlike Vietnamese, Thai A-D-Source verbs occur with the [+L,+src] case marker. As shown in (6.139) above with sîi 'buy', and (6.173) here, they can also occur with the preposition kâp.

- (6.173) chăñ yàak yîim naŋsîi {kâp} Pûk (PK)
 I want borrow book {with}
 {càak}
 {from}
- [+NM] [+AC] [+C], [+L] [+AC]
 [+AGT] [+OBJ] [+src] [+DAT]

'I want to borrow a book from Pook.'

- (6.174) ylp hîip nîi càak chăñ pay (PK)
 pick up box this from I away
 [+AC] [+L] [+AC] [+Adv]
 [+OBJ] [+src] [+DAT]

'Take this box from me.'

The A-D-Source verb ylp can take a LOCATIVE in place of its DATIVE:

- (6.175) Wanthanaa ylp mîit càak tó? (PK)
 pick up knife from table
 [+NM] [+AC] [+L] [+AC]
 [+AGT] [+OBJ] [+src] [+LOC]

'Wanthanaa picked the knife up from the table.'

6.2.3 COMPARISON OF THREE LANGUAGES

6.2.3.1 Cross-Language List of Coverbs

The preceding sections on Khmer and Thai give an overview of coverbs in those two languages. In comparing coverbs in Khmer, Thai, and Vietnamese, one can hardly fail to notice the parallel behaviour in grammatical function and semantic import. Following is a chart showing the

approximately parallel coverbs in the three languages. The glosses given are, of course, very general and do not specify particular emphases in the individual languages. Meanings of the corresponding verbs are also given. The sub-CF is given for each [+L] case marker. (Underscored Ps are not included.)

	Vietnamese	Khmer	Thai		Verb
[+L]					
[+lcn]	ở	nɪw	yùu	in, at	be in/at
[+src]			càak	from	leave from
[+gol]	(di)	tɪw	pay	to (away)	go
[+gol]		mɔɔk	maa	to (hither)	come
[+gol]	lại			back to	come (back)
[+gol]	về		klàp	back to	go back
[+gol]	qua	claaŋ	khâam	across (to)	go across
[+gol]	vào/vào	coul	khâw	into	go in
[+gol]	ra			out (to)	go out
[+gol]	lên	laaŋ	khîŋ	up (to)	go up
[+gol]	xuống	coh	lon	down (to)	go down
[+gol, -ter]	(theo)	taam	taam	following	follow
[+ter]	đến/tới	dal	thǎŋ	reaching	arrive at
[+D]	cho	qaoy/cuun	hây	to, for, on be-half of	give

CHART VI-1 Cross-Language List of Coverbs

Càak (cf. Thai above) as both verb and preposition occurs in literary Khmer (and Old Mon) (S. Pou, personal communication). It is interesting that klàp 'go back' occurs in Khmer, but only as a verb, not a P. Khmer cəñ 'go out' and Thai ʔòɔk 'go out' occur as verbs and adverbs but never as prepositions, as discussed above in Secs. 6.2.1.1.1 and 6.2.2.1.1, respectively.

Vietnamese đl is not included in the list of Vietnamese locative coverbs in Sec. 5.1.1 and is included here parenthetically because it occurs as a coverb only in very restricted circumstances, although it occurs regularly as an OBJECTIVE-LOCATIVE verb and freely as an adverb. Both Khmer tɪw and Thai pay occur freely as coverbs. For instance, both sentences in (6.176) are grammatical.

(6.176) Khmer: ...kñom tralap tiw pteəh (Huffman 1973:502)

Thai: ...phǒm klàp pay bâan
 I return to house
 [+NM] [+V] [+P] [+AC]
 +L [+LOC]
 +gol]

'I'm going back home.'

The analogous sentence in Vietnamese, (6.177), is not grammatical.

(6.177) * tòi {trở-lại} đi nhà
 về
 I return to house
 [+NM] [+V] [+P] [+AC]
 +L [+LOC]
 +gol]

'I'm going back home.'

The behaviour of đi is discussed in detail in Sec. 5.1.2.

Another Vietnamese coverb listed here but not included in the list in Sec. 5.1.1 is theo 'following, according to; follow'. The problematic status of theo is discussed in Sec. 5.1.2. It is not certain what case form P theo marks, and it is not certain whether P theo is synonymous with V theo.

Other than đi and theo, all the words listed here for the three languages can be clearly identified as coverbs; that is, each word in the list occurs as a P and has a corresponding homophonous and synonymous V.

6.2.3.2 CR and L Sub-CF Cooccurrences

All but one of the coverbs in each language are [+L] case markers. It seems worthwhile to make a cross-language comparison of L sub-CF and case relation cooccurrences. In Sec. 3.2.4, Chart III-2 for Vietnamese case relation (CR) and case form (CF) cooccurrences shows the CR cooccurrences for the L sub-CFs. This part of the chart is repeated here, including the cooccurrences for Khmer and Thai, based on the evidence presented in Secs. 6.2.1 and 6.2.2.

It is interesting that the [-ter] property of most of the [+gol] case markers in Thai seems to prohibit them from marking TIME, DATIVE, or OBJECTIVE, and only those [+gol] case markers which can have a [+ter] interpretation and the case marker which is lexically marked [+ter] can mark TIME. (See sentence (6.107) above, where maa 'to (hither)' occurs with a [+TIM] noun.) A rule such as [-ter] → [-__ [+TIM]] will protect the [+gol, -ter] Ps from misoccurrences.

V = Vietnamese, K = Khmer, T = Thai

Sub-Cf	CR:	LOC	TIM	DAT	OBJ
[+lcn]		V K T	K		
[+src]		V K T	V K T	K T	
[+gol]		V K T	V K T [+ter]	V K	V
[+ter]		V K T	V K T	V T	V T

CHART VI-2 Comparison of CR and L Sub-CF Co-occurrences in Vietnamese, Khmer, and Thai

6.2.3.3 Comparison of Verb Classes and Case Frames

The verb classes of Khmer and Thai have been analysed in this study in such a way as to parallel the verb classes of Vietnamese, although only the AGENTIVE-DATIVE (A-D), the AGENTIVE-LOCATIVE (A-L), and the OBJECTIVE-LOCATIVE (O-L) classes have been considered in Khmer and Thai since these are the classes relevant to a discussion of coverbs.

Furthermore, the O-L verbs in these two languages have not been broken down as carefully into O-L-Goal, O-L-Source, and O-L-Location classes, as has been done in Secs. 3.3.5.4, 3.3.5.5, and 3.3.5.6 for Vietnamese.

Sec. 3.3.6 above gives a semantic tree of ten verb classes in Vietnamese. CHART VI-3 below gives the part of the tree with the pertinent classes of verbs, A-D, A-L, and O-L. For each class, the case frame that is generally applicable for each language is given. (Vtn = Vietnamese, Khm = Khmer, Th = Thai.) In the A-D class, the first frame given for each language is for A-D-Goal verbs, the second is for A-D-Source verbs. Meanings of verbs are given as examples for each class.

It will be noticed that the general case form (CF) and case relation (CR) cooccurrences are the same for all three languages in the A-L and O-L classes. This summary chart does not show the subclassification of verbs according to CF occurrence; i.e. it does not show which A-L and O-L verbs have free choice between the AC and L CFs and which are restricted to one or the other. For example, the O-L verbs which have corresponding prepositions take their LOCATIVES only in the AC case form, but this fact is not shown in this chart. For discussions of such subclassification, see the sections on verb classes in the individual languages.

	+voluntary		
	+agentive		-agentive
	+locative	(-locative)	+locative (-locative)
	+direction	-direction	
	+dative	-dative	
	+goal		
	-goal		
	A-D	A-L	O-L
	[+[+NM,+AGT]__] +__ [+AC,+OBJ]	[+[+NM,+AGT]__] +__ [+AC,+OBJ]	[+[+NM,+OBJ]__]
Vtn	[+__ ({ [+AC,+D,+L+gol],+DAT })] [+__ ({ [+L,+dir,+LOC] })] [+__ ({ [+AC,+OBJ,+poss] })] [+__ ({ [+AC,+DAT] })]	[+__ ({ [+AC,+rel],+LOC })] [+__ ({ [+L] })]	[+__ ({ [+AC,+L],+LOC })]
Khm	[+__ ({ [+AC,+D],+DAT })] [+__ ({ [+L,+gol] })] [+__ ({ [+L,+src,+DAT] })]	[+__ ({ [+AC,+rel],+LOC })] [+__ ({ [+L] })]	[+__ ({ [+AC,+L],+LOC })]
Th	[+__ ({ [+AC,+D,+C],+DAT })] [+__ ({ [+L,+src],+DAT })] [+__ ({ [+C] })]	[+__ ({ [+AC,+rel],+LOC })] [+__ ({ [+L] })]	[+__ ({ [+AC,+L],+LOC })]

Examples:

give, sell, send; buy, receive

put, throw, plant, hang; uproot

go, come, walk, swim, sit

CHART VI-3 Comparison of Verb Class Case Frames

The greatest variance between the languages is in the A-D verbs. In Vietnamese, many A-D-Goal verbs can have LOCATIVES in place of their DATIVES. In the list of A-D-Goal verbs in Thai, only *sòŋ* 'send' can have a LOCATIVE in place of its DATIVE; the same is true of *pñæ* 'send' in Khmer. Vietnamese and Khmer can mark Goal DATIVE with L case markers; Thai cannot use the L CF with Goal DATIVES, and is the only one of the three languages to mark DATIVE with the C CF. Thai and Khmer mark Source DATIVES with the L Source case marker; Vietnamese has a special possessive noun which occurs with Source DATIVES (see Sec. 3.3.5.1.2 above).

The A-D verbs for 'give' in Vietnamese and Khmer, *cho* and *qaoy*, respectively, take their DATIVES in the AC case form only (although this subclassification is not shown on Chart VI-3). This behaviour is consistent with the coverb derivation hypothesis for verbs which can have corresponding coverbs. Thai *hây* is not so nicely behaved in terms of the hypothesis; for discussion of this problem, see Sec. 6.2.2.4 above and Sec. 6.2.3.4 following.

6.2.3.4 Apparent Counterexamples to the Coverb Derivation Hypothesis

In the analysis proposed for coverbs in Vietnamese, the claim is made (in Sec. 5.3.2) that, in order for a verb to have a corresponding derived preposition marking the case form of a certain case relation, it must as a verb take that case relation only in the AC case form. "A verb's ability to occur as a coverb can be directly correlated with its case frame as a verb." It has been found in Vietnamese and further substantiated in Khmer and Thai that this restriction has to be modified to state that a coverb-potential verb cannot take a noun in the case form marked with the verb's own value. That is, a [+gol] verb, for example, can take its LOCATIVE with a [+ter] or [+src] P, as in (6.178) and (6.179),

(6.178)	kaal	naa	baan	yæŋ	tɨw	dal	Kraceh	(Huffman 1970:184)
Khmer	time	which	able	we	go	reaching		
	[+AC]			[+NM]	[+V]	[+P]	[+AC]	
	[+TIM]			[+OBJ]	[+gol]	[+L]	[+LOC]	
						[+ter]		

'When will we get to Kratie?'

(6.179)	Dæŋ	pay	rótfaɣ	càak	Krunthêep	(Kullavanijaya 1974:47)
Thai		go	train	from	Bangkok	
	[+NM]	[+V]	[+AC]	[+P]	[+AC]	
	[+OBJ]	[+gol]	[+INS]	[+L]	[+LOC]	
				[+src]		

'Dang went (somewhere) by train from Bangkok.'

but it cannot take its LOCATIVE with a [+gol] P, as in

(6.180) * Kim lên vào phòng
Viet. go up into room

[+V]	[+P]	[+AC]
[+gol]	[+L]	[+LOC]
	[+gol]	

'Kim went up into the room.'

(To be grammatical, (6.180) should be Kim lên đi ('go') vào phòng ('Kim went up and went into the room') or Kim lên và ('and') vào (V) phòng, the first being preferred.)

Also, see remarks in Sec. 6.2.1.1.1 regarding [-ter] coverbs.

In (6.181), pay, which is [+gol], occurs with khâw, which is also [+gol], but pay here is a directional adverb modifying the action of khâw, since it is presumed that the relator noun nay cannot take [+gol] pay as a P (see discussion in Sec. 6.2.2.1.3 above).

(6.181) khun khæy khâw pay nay thám máy (Panupong
Thai Title ever enter away inside cave Neg 1970:139)

[+NM]	[+V]	[+Adv]	[+AC]
[+OBJ]	[+gol]		[+LOC]

'Have you ever been in the cave?'

However, there are some contradictions to this thesis in Thai. As may have been noticed in (6.176) in Sec. 6.2.3.1, the [+gol] verb klàp, which has a corresponding [+gol] P ((6.117) in Sec. 6.2.2.1.1) does occur with a [+gol] P. (6.176) is repeated here.

(6.176) ...phôm klàp pay bân (Huffman 1973:502)
Thai I return to house

[+NM]	[+V]	[+P]	[+AC]
[+OBJ]	[+gol]	[+L]	[+LOC]
		[+gol]	

'I'm going back home.'

This is not seen, however, as refuting the entire coverb derivation hypothesis, but rather as a peculiarity of the verb klàp. It is quite possible that pay in (6.176) is an adverb, but it is also possible to consider that klàp is a verb which is in the process of allowing a co-verb occurrence and there is variation in usage. (See Sec. 7.1 below for further discussion of such a process.)

This latter view could be held regarding the problem of Thai hây 'give', which is analysed in this study (Sec. 6.2.2.1.1 above) as occurring also as a [+D] P. As a verb, hây customarily takes its DATIVE in the AC or C case form. However, it can also take DATIVE in the D case form if the D case form is marked by the underived P kàa 'to', as in (6.182).

(6.182)	khăw	<u>hây</u>	naŋsɿi	sɔɔŋ	lem	<u>kəə</u>	phôm	(Huffman 1973:15)
Thai	3p	give	book	two	CL	to	I	
	[+NM +AGT]	[+V +__ [+DAT]]	[+AC +OBJ]			[+P +D]	[+AC +DAT]	

'He gave me two books.'

This is clearly a counterexample to the coverb derivation hypothesis and accounts for one of the reasons Kullavanijaya (1974:85ff; see Sec. 6.2.2.1.1 above) analyses *hây* as a [+B] P instead of a [+D] P. It is possible to hypothesise that this irregularity is the result of variation during historical change - that *hây* is in the process of allowing P occurrence and, in some dialects or styles of speech, *hây* may occur as a [+D] P, and as a verb may not occur with *kəə*. Some speakers even now do not accept *kəə* with *hây*. For further discussion of historical change and a hypothesis regarding verbs and coverbs, see Sec. 7.1 below.

However, there could be other factors involved. As mentioned above, a coverb-potential verb cannot occur with a P marked with the verb's own value. Given as example was the distinction between [+gol] and [+ter] features on Vs and [+L] Ps. A parallel distinction may exist for *hây* and *kəə*. *Hây* has a particular [+beneficial] semantic property, whereas *kəə* does not (PK, personal communication). If we hypothesise the following feature matrices for *kəə* and P *hây*,

<i>hây</i> 'to, for'	<i>kəə</i> 'to'
$\begin{bmatrix} +P \\ +DERV \\ +D \\ +ben \\ +_ [{+DAT, +BEN}] \\ \dots \end{bmatrix}$	$\begin{bmatrix} +P \\ +D \\ -ben \\ +_ [+DAT] \\ \dots \end{bmatrix},$

then V *hây* could have the matrix:

<i>hây</i> 'give'
$\begin{bmatrix} +V \\ +dative \\ +beneficial \\ +[+NM, +AGT] _ \\ +_ [+AC, +OBJ] \\ +_ ([{+AC, +C, +D}, +DAT]) \\ -_ [+D, +ben, +DAT] \\ \dots \end{bmatrix}$

Such an explanation would fit the facts as well as showing *hây*'s behaviour to be consistent with the coverb derivation hypothesis.

In general, the evidence from Khmer and Thai, even at this superficial level of investigation, strongly supports the coverb hypothesis as made for Vietnamese.

CHAPTER VII

THE HISTORICAL HYPOTHESIS

7.0 INTRODUCTION

The widespread occurrence of the coverb phenomenon raises the question not only of its areal historical role but of its grammatical historical role and its role in the relationship between verbs and prepositions. The belief here that prepositions share significant grammatical features with verbs is reflected in the inclusion of case frames in their lexical feature matrices (Secs. 3.1 and 3.2.2.3-7) and is discussed in detail in Sec. 5.3.3. The question is whether these shared features are a universal characteristic, or whether they are coincidental, caused by category overlap or squish, or are the result of historical development.

Ross, in his paper "The Category Squish" *Endstation Hauptwort* (1972), proposes that the distinction between the categories Verb, Adjective, and Noun is not discrete but "squishy", that there is a quasi-continuum which contains, besides V, A, N, and other categories, the category Preposition. I think this hypothesis is questionable. There could well be a hierarchical relationship between the categories, a relationship that could be shown by lexical features and lexical derivation rules. Also, it is certainly true that individual lexical items can appear to be squishy in terms of their inclusion in several categories. However, since in any given sentence, a word falls in one category or another, i.e. it is subject to given category-particular syntactic rules, a functional description of syntactic categories would have to say that each comprises a fixed discrete inventory. Thus, we must say that there is no such thing as "category overlap".

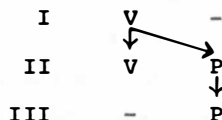
The claim here is that the sharing of features is a universal property of Vs and Ps (prepositions/postpositions), and the hypothesis

is that Vs and Ps share features not coincidentally but as the result of historical derivational relationships. Further, it is claimed that the occurrence of coverbs - prepositions which have corresponding homophonous and synonymous verbs - represents in a language a stage in the process of a word changing over a period of time from V to P.

The similarities and distinctions between Vs and Ps are discussed in Sec. 5.3.3 above. The claim regarding the nature of coverbs is discussed at length below.

7.1 COVERBS AS A STAGE IN THE DERIVATION OF P FROM V

To describe what is meant by saying that coverbs represent a stage in the process of a word changing over a period of time from a V to a P, three broad stages can be postulated for the history of a single lexical item:



In stage I, the word occurs only as a verb. In stage II, the word occurs both as a V and as a P which may or may not retain the same semantic features as the verb. (For discussion of semantic shift in Ps with homophonous verbs, see Li & Thompson 1973c:7, and Lord 1973:280-6.) It goes without saying that within this stage, there is a long range of varying usage such that at the beginning of the stage the word may perhaps be used as a P only rarely and under given conditions, and at the end of the stage usage as a verb occurs rarely or vestigially. In stage III, the word is no longer used as a verb and is used only as a P.

A coverb is a P at stage II, a P that coexists with an etymologically related verb. In this study, a coverb is defined as a P which retains the semantic features derived from the verb and thus shares semantic features with the coexistent verb. It is this homophonous and synonymous state between the P and the V that keeps the relationship alive in the mind of the speaker such that there exists a synchronic derivation rule relating the P and the V. (See Sec. 5.3.3 above for the Coverb Derivation Rule.)

Evidence supporting the hypothesis that coverbs are Ps derived from Vs is set forth in Sec. 7.3 below. First, we will take a look at modern Vietnamese prepositions to see if they can provide support for the hypothesis with regard to Vietnamese coverbs.

7.2 MODERN VIETNAMESE PREPOSITIONS

There is little evidence in modern Vietnamese that prepositions which do not now have corresponding verbs were verbs at an earlier stage of the language, other than the feeling among native speakers that they *are* verbs. What evidence I have found is presented here.

The following prepositions, discussed individually in Secs. 3.2.2.4-7, are considered to be synchronically underived prepositions.

tại	in	[+L,+lcn]
từ	from	[+L,+src,+ext]
khỏi	out of	[+L,+src,-ext]
bằng	by	[+I]
với	with	[+C]
giùm/hộ	for	[+B]

The Location preposition *tại* 'at, in' is considered to be a loan from the Chinese coverb *zài* 在. (See Dao D-A 1957:224, Ly-V-H 1962:452, and Sec. 4.1 above.)

The Source preposition *từ* 'from' may very likely be related to the restricted verb *từ* 'leave, abandon'. The verb *từ* is restricted in that it occurs only in Sino-Vietnamese compounds, as in (7.1). (Cf. Thai Source coverb *càak* 'leave; from'.)

- (7.1) *tôi từ-giã Huế vào 1965* (Tôn-nữ Kim-Chi)
I take in
leave of
'I left Hue in 1965.'

The Source preposition *khỏi* 'out of' appears to have a corresponding verb *khỏi* 'avoid, escape; recover', whose general usage, however, seems to be restricted to occurrence with other verbs, as in (7.2) and (7.3), both from Nguyen D-H 1966:223, and (7.4) from Le & Le 1962:195.

- (7.2) *tôi không khỏi nhớ tới anh ấy*
I not avoid remember to he
'I can't help remembering him.'

- (7.3) *anh khỏi phải đi*
elder avoid must go
bro.
'You don't have to go.'

- (7.4) *bà-ấy khỏi bệnh chưa*
she avoid be sick yet
'Has she recovered from her illness?'

Tôn-nữ Kim-Chi suggests that *khỏi* is used only as a preposition in the

South but is used as both a preposition and a verb in the North, and bình in (7.4) can be interpreted as a noun 'illness', making khỏi the only verb in sentence (7.4). Further, Nguyễn Đình-Hòa, a Northerner, gives (7.5) (1966:223).

- (7.5) anh khỏi hẳn chưa
 elder recover thoroughly yet
 bro.

'Have you completely recovered?'

It may be that khỏi as the only verb in a sentence occurs only in this special use, meaning 'recover from illness'. Khỏi cannot occur as the only verb in a locative sentence; i.e. (7.6) is ungrammatical.

- (7.6) * Sơn khỏi vườn
 avoid garden

{ *'Son went out of the garden.'* }
 { *'Son avoided the garden.'* }

It seems fair to hypothesise that V khỏi was at one time a freely occurring verb and that V khỏi and P khỏi were more closely related semantically than they are now, and to suggest that at one time sentence (7.6) would have been a grammatically acceptable sentence.

One sentence, (7.7), with the [+C] preposition với 'with', creates a problem in that với does not mark a case relation with the verb in the usual sense since it does not mean 'return WITH us to Viet-Nam':

- (7.7) chị sớm trở-lại Việt-Nam với chúng em
 elder early return with Pl young
 sis.

'Return to Viet-Nam soon to be with us.'

It may possibly be considered to be a conjoined verb or the main verb of a purposive complement: 'return and/to BE WITH us', although it could also express a comitative relationship between two NPs and mean 'return to Viet-Nam and us'.

The [+B] case markers giúp and hộ 'for, help', are felt by many speakers to be verbs (e.g. these words are glossed as verbs in Nguyen D-H (1966)). (7.8) is an acceptable expression in which giúp appears to be a verb.

- (7.8) giúp tôi đi
 help I go (Imper)

'Please help me / (Do it) for me.'

The expression might equally well be considered a prepositional phrase, except the imperative đi otherwise occurs only with verbs, presumably [+active] verbs. Also, giúp in (7.9) is considered by N-D Liem to be a

verb, but such use occurs only in money-lending situations and is used typically by money-lenders for particular BENEFACTIVE emphasis (Liem, personal communication).

- (7.9) tôi giùm ông hai trăm
 I help Sir two hundred
 'For YOU, I'll loan 200.' (Probably at 100% interest!)

The most substantial evidence for giùm having been a full-fledged verb is the fact that, according to Tôn-nữ Kim-Chi, in some rural areas of Central Viet-Nam giùm is often used for làm 'do' or giúp 'help'. Typical is the expression in (7.10), where giùm is a verb meaning 'do'. (Việc 'work' is a noun, not a verb.)

- (7.10) có việc giùm không
 have work do not
 'Do you have work for me to do?'

For these speakers, (7.11) would be acceptable, although for most speakers in other dialects, it would not, or at least would be considered unsophisticated.

- (7.11) ? ông-ấy giùm tôi nhiều
 he help I much
 'He helped me a lot.'

The preposition hộ is a Northern word and is used as a verb in the North much more than giùm is used as a verb in the South. Thus, in the North, (7.12) with hộ is acceptable.

- (7.12) ông-ấy hộ tôi nhiều
 he help I much
 'He helped me a lot.'

It seems likely that hộ and giùm show different stages of change and that these stages coincide - very roughly - with geographical areas: In the North, these words can be used as both V and P; in some dialects of Central Viet-Nam, they are both V and P, and in other dialects V is not so acceptable; in the South, usage as V is unacceptable at least in polite use, while usage as P is common.

Like the coverbs, giùm can occur as an adverb, as in (7.13), where giùm modifies the verb giúp-đỡ.

- (7.13) mong cô giúp-đỡ giùm cho em
 hope miss help for for young sib
 'I hope you'll help me.' (polite urging)

There seems to be no evidence that the P với 'with' is derived from a verb. However, it, too, can occur as an adverb, as in (7.14), where với

In the following sections, some instances of change involving verbs, adverbs, and prepositions in Pacific languages, Chinese, and some West African languages are cited as evidence supporting the claim that there is a historical derivational relationship between Ps and Vs and that co-verbs represent a stage in the derivation of Ps from Vs.

7.3.1 VERBS, ADVERBS, AND PREPOSITIONS IN PACIFIC LANGUAGES

In a discussion of Proto-Oceanic grammar, Pawley (1974:32-6) makes a distinction between "true prepositions" and "prepositional verbs" ("certain disyllabic forms which connect a verb with its grammatical object" and which have verbal suffixes (p.32)). He reconstructs a number of prepositional verbs of which the following are of particular interest here:

*pani reconstructible as an independent verb '*give*'

"In languages which reflect this form as a prepositional verb, its function is most often as a dative, indicating motion to an animate being, sometimes also to an object."

*tani '*motion away from*'

*su(1dR)i "...indicates motion to or after a person, or connection of the sort translatable as '*according to, concerning, on behalf of*'. As an independent verb it means '*to follow*'." (Cf. Vietnamese theo '*follow; according to*'.)

Dempwolff (1938) associates Proto-Austronesian (PAN) *(t')akaj '*climb, mount*' with corresponding modern words in Fijian and Sa'a meaning '*upward*' (p.147); and PAN *mayi '*hitherward*' with modern Indonesian, Malay, etc., mari '*come*', which seems to be the reverse of V > P. Andrew Pawley (personal communication) states that some words which are purely adverbs in most Polynesian languages were verbs in Proto-Oceanic. He cites as examples the following Maori direction markers, and gives corresponding Proto-Oceanic words with their likely meanings (personal communication).

mai <i>hither</i>	*mai <i>towards</i> (possibly ' <i>come</i> ')
iho <i>down</i>	*nsipo <i>descend</i>
ake <i>up</i>	*nsake <i>ascend</i>

This sort of development of directional words is also cited in a discussion of directional suffixes in Kusaiean, a Micronesian language, by K. Lee (1974a:41-2). He proposes that directional suffixes in Micronesian and Polynesian languages might have been verbs historically. He gives the following forms for Oceanic (from Grace 1969) and likely meanings.

*mai	<i>come</i>
*lako	<i>go, walk</i>
*nsake	<i>upwards; climb, lift, rise, jut out</i>
*nsipo	<i>downwards</i>

and suggests that at an earlier stage they might have been used as verbs only but later began to be used as directional suffixes. "When we observe some Micronesian and Polynesian languages with such an assumption, we can notice at least three different stages of development" (p.41), as follows.

Tongan - used as both directional suffixes and as verbs

mai	<i>to, towards speaker; give (to speaker)</i>
atu	<i>to, towards listener; give (to listener)</i>
hake	<i>up, upwards; ascend, go up</i>
hifo	<i>down, downwards; descend, go down</i>

Samoaan - some used as both, some only as directional suffixes

mai	<i>towards speaker</i>
atu	<i>away from speaker and towards listener</i>
a'e	<i>up; go up, climb</i>
ifo	<i>down; give in, surrender, bow, control, restrain</i>

Kusaiean - Directional suffixes are never used as independent verbs.

ma	<i>to the speaker</i>
oht	<i>to the listener</i>
lah	<i>away</i>
acng	<i>to (a certain point)</i>
ack	<i>up</i>
yah	<i>down</i>
elihk	<i>to different directions</i>
eni	<i>to one direction</i>

The parallel between the occurrence in Oceanic languages of locative and dative directional words and the kind of locative and dative coverbs that occur in mainland Southeast Asian languages is obvious. It suggests that there might also be a parallel in historical development.

7.3.2 VERBS AND PREPOSITIONS IN MANDARIN CHINESE

Discussions concerning historical development of prepositions in Mandarin Chinese have dealt little if any with directional adverbs. However, a number of statements have been advanced regarding prepositions.

Suggestions have been made that all the prepositions of Chinese were verbs in an earlier stage of the language (e.g. see Liang 1971:51;

Li and Thompson 1973c:3; and C. Li 1974). Chao (1968:749) refers to the "transitional nature of Chinese prepositions, both in the classificatory and in the historical sense". He cites the example of two contemporary prepositions, 於 yú < jwo and 于 yú < jiu, which were used as main verbs in classical times (p.336). The direct object marker bǎ, which is "untranslatable as a preposition" but which is considered by some to be a preposition, is never a full verb in modern Chinese (Liang 1971:37). T'sou (1972:12) states that, in most dialects of Chinese, bǎ is "no longer a fully functional verb", but he gives examples from Ancient Chinese of its use as a verb meaning 'hold, grasp'. Li and Thompson (1973b:3) state that prior to the Tang dynasty (9th century A.D.) bǎ was a verb meaning 'to take hold of'. Examples of modern prepositions used as verbs in Archaic Chinese are given in Li and Thompson 1973c. An illustration is the Modern Chinese P cóng 'from' (as in (7.15)) used as a verb in the Fifth Century B.C., (7.16).

(7.15) nǐ děi cóng gè fāngmiàn kàn (Li & Thompson 1973c:7)
 you must from every angle look
 'You must look at it from every angle.'

(7.16) bǐ cǎo ěr zhàng yǐ cóng zhǐ (Li & Thompson 1973c:4,
 must use your stick to follow (it) from Lǐ Jì)
 'You must wield your stick to follow it.'

Cóng does not occur as a verb in Modern Chinese; (7.17) is ungrammatical.

(7.17) * nǐ děi cóng zhèr (Li & Thompson 1973c:8)
 you must from there

C. Li (1974) and Li & Thompson (1973b and 1973c) make the claim that Chinese coverbs are prepositions derived from verbs which occurred regularly in serial verb constructions. They claim further that the category change involves a word-order change from Subject-Verb-Object (SVO) to SOV. That is, the first verb in a construction SVOV(O) "can develop into a case marker thus collapsing SVO complex sentences into simple SOV sentences" (Li & Thompson 1973b:15). They suggest (1973c:5, 20) that Mandarin prepositions are still in the process of changing from earlier verbs, and (p.5) that this explains the non-homogeneity in the class of prepositions. For example, some prepositions can still occur optionally with the verbal suffix -zhe. Further, they list (p.7) three types of prepositions representing three stages of change: 1. those matching verbs in sound and meaning, 2. those matching verbs in sound but not in meaning, 3. those with no matching verb. "The differences among these three types of [prepositions] with regard to how closely they match verbs is to be expected, given our hypothesis that some

[prepositions] have become less like verbs than others" (p.8). For an example of a preposition of type 3, see (7.15) above with *cóng*. (7.18) and (7.19), from Li & Thompson (1973c:7), illustrate type 2.

(7.18) *wǒmen àn tāde yìsi bàn ba!*
we according to his idea do Final Particle
P
'Let's do it according to his ideas.'

(7.19) *yǒu-rén àn mén-lǐng*
someone press doorbell
V
'Someone is ringing the doorbell.'

Examples of type 1 - true coverbs (as defined in this study) - may be found in the section on Chinese coverbs above, Sec. 4.1.

7.3.3 VERBS AND PREPOSITIONS IN WEST AFRICAN LANGUAGES

Some of the Kwa languages of West Africa have coverbs, notably the words for 'be in/at; in, at' and 'give; to, for' (Ansre 1966 and Lord 1973). When used as prepositions these words are not conjugated, as Kwa verbs otherwise are. Lord (1973:271) notes that "Locative prepositions in Kwa are often homophonous with locative verbs, verbs of possession, and incompletive aspect markers. Evidence suggests that this homophony is not accidental, and that locative prepositions have developed historically from verbs in serial constructions". She shows differences in the prepositions which are similar to the differences in Chinese prepositions given by Li and Thompson (1973c) and noted above, and gives evidence from different languages showing the various stages of change. She attributes these differences to like cause: Prepositions have derived from verbs at differing rates of speed - differing rates between lexical items in the same language and differing rates between languages. She states (p.274) that the extent to which prepositions have lost their verbal characteristics "reflects the extent to which they have drifted from the serial pattern of other verbs". For example, she notes that the Gã verb *yè* 'be at' does not take the usual range of tense-aspect and negation markers. "It may be that *yè* was formerly fully verbal and is now going through a transition stage to a solely prepositional identity" (p.275).

Ansre (1966:30) quotes Westermann (1930:126f) as giving a list of words which Westermann claims are in the process of historical change from verbs into prepositions, adverbs, and conjunctions.

7.3.4 CONCLUSION

It is apparent from the observations made by many different analysts regarding far-flung and unrelated languages which show similar types of lexical items and processes involved in the coverb phenomenon that such a phenomenon is not uncommon. Further, it is reasonable to hypothesise that Southeast Asian coverbs, like the coverbs of West Africa and China, represent a stage in the historical derivation of prepositions from verbs.

7.4 CONDITIONS FOR THE DERIVATION OF P FROM V

Given the hypothesis that coverbs are a universal and orderly process in the derivation of preposition from verb, we might hope to be able to predict what kind of verb may be subject to this process. Li and Thompson (1973c:9) state only that the "fluctuation between the verb and preposition forms is controlled by grammatical considerations...It is not quite so easy to determine which verbs at a given stage are eligible for the shift to V + P". They cite Talmy Givón (1974) as "offering significant discussions of semantic types of verbs which are most likely to undergo this process".

Lord (1973:293) asks, "Why do certain verbs, like Locatives, undergo this change of grammatical category?". She suggests that a verb becomes a preposition when it loses semantic dominance, which it does when it expresses such aspectual case relationships with another verb as location, means, manner, recipient, and benefit: "Because location is generally considered to be less significant than other aspects of events, in the serial construction the Locative verb phrase is not as important as the other verb phrase semantically (the meaning of the sentence is clear and the location phrase doesn't need to be fully verbal). Accordingly, it loses status syntactically; i.e. it loses its verb properties, remaining as a mere function word".

Even if one were to accept the undefined notion of "semantic dominance", that function words are "mere", and that perception of semantic significance is the cause rather than the result of syntactic difference, such an analysis ignores the semantic properties of the main verb. For example, the *put* in

(7.20) *She PUT the book ON THE TABLE.*

has an inherent locative semantic property which requires it to have a LOCATIVE phrase in its case frame. That is, contrary to Lord's claim that the meaning of the sentence is clear without the location phrase, the sentence without the location phrase is, in the case of *put*, ungrammatical:

(7.21) * *She PUT the book.*

It seems necessary to go further than vague and subjective semantic criteria alone and determine what are the semantic-syntactic characteristics of verbs which undergo the V > P change.

First, it is true that every event has a presupposed location, and in this sense location is peripheral to the main event of a sentence and, theoretically, every verb can have a location phrase. This is what is called outer LOCATIVE (Fillmore 1968:26 fn 34; Platt 1971:30-3; Teng 1972:60; also see Sec. 3.3.4.1 above for discussion of the distinction between inner and outer LOCATIVE). However, Locative verbs (verbs with an inherent semantic locative property) have inner LOCATIVE phrases and are here divided into AGENTIVE-LOCATIVE and OBJECTIVE-LOCATIVE verbs. Sec. 3.3.4.2 above discusses a similar distinction between DATIVE (inner) and BENEFACTIVE (outer). Verbs with an inherent semantic dative property are termed AGENTIVE-DATIVE verbs here. These verb classes are established on the bases of case frames for verbs and case relation and case form cooccurrences. (See Secs. 3.3.5.1, 3.3.5.2, and 3.3.5.4-6 for examples of these verbs in Vietnamese). The claim is made here that only Locative verbs can become [+L] prepositions and that only Dative verbs can become [+D] prepositions.

Further, it is found in Vietnamese, Khmer, and Thai that verbs which have corresponding prepositions are only those Locative and Dative verbs whose LOCATIVE and DATIVE phrases, respectively, must occur in the AC case form, that is, without intervening Ps. It will be recalled from Sec. 5.3.2, Case Frames for Locative Verbs, that those OBJECTIVE-LOCATIVE verbs which have corresponding prepositions have in their case frames the features [+__([+AC,+LOC])] and [-__([+L,+LOC])], stating that they cannot take a [+L] case marker with their LOCATIVE nouns. For example, the verb *xuống* in (7.22) cannot take a P in its LOCATIVE phrase; (7.23) is ungrammatical.

(7.22) cô-ấy xuống nhà bếp
 she go down house kitchen
 [+NM] [+V] [+AC]
 [+OBJ] [+loc] [+LOC]
 '*She went down to the kitchen.*'

(7.23) * cô-ấy xuống vào nhà-bếp
 she go down into kitchen
 [+NM] [+V] [+L] [+AC]
 [+OBJ] [+loc] [+gol] [+LOC]
 '*She went down into the kitchen.*'

Xuống can itself occur as a P, as in (7.24).

- (7.24) cô-ấy gửi đĩa xuống nhà-bếp
she send plate down to kitchen
 [+NM] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+L] [+LOC]
 [+gol]

'She sent a plate down to the kitchen.'

There are the same characteristics for the A-D verb *cho* 'give', which has a corresponding P *cho* 'to, for'. As a verb, *cho* must take its DATIVE phrase in the AC case form: (7.25) is grammatical, (7.26) is not.

- (7.25) cô-ấy cho nó một cái
she give 3p one thing
 [+NM] [+V] [+AC] [+AC]
 [+AGT] [+dat] [+DAT] [+OBJ]

'She gave him one.'

- (7.26) * cô-ấy cho một cái cho nó
she give one thing to 3p
 [+NM] [+V] [+AC] [+P] [+AC]
 [+AGT] [+OBJ] [+D] [+DAT]

'She gave one to him.'

Some speakers accept (7.26) if *nó* is [+BEN]; that is, *'She gave one (to somebody else) FOR him.'* (7.27) shows *cho* as a P, with the DATIVE occurring either before or after the OBJECTIVE.

- (7.27) a. cô-ấy gửi cho nó một cái
she send to 3p one thing
 [+NM] [+V] [+P] [+AC] [+AC]
 [+AGT] [+dat] [+D] [+DAT] [+OBJ]

- b. cô-ấy gửi một cái cho nó

'She sent him one.'

Thus, it appears that a verb which has an especially close semantic relation to a particular case can occur "directly", i.e. without a P - with that particular case relation, and can have a corresponding P marking that particular case relation with another verb. This phenomenon is what is called here the Coverb Derivation Hypothesis and has been discussed at length in Sec. 5.3.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

8.0 OBJECTIVES OF WORK

It was stated in the beginning section (Sec. 1.1) that the principal purposes of this study were to 1) describe and illustrate the behaviour of coverbs in Vietnamese, 2) determine the syntactic function of coverbs and their role in the classification of verbs in Vietnamese, 3) determine how this function can be characterised in the grammar in a way that is both explicit and intuitively satisfying, 4) make introductory investigation into coverb phenomena in other Southeast Asian languages to find evidence to support the hypothesis that coverbs are a Southeast Asian areal phenomenon, and 5) give evidence to support the hypothesis that coverbs represent a stage in a verb-to-preposition historical change.

In the following sections, the major findings of the study are summarised.

8.1 DESCRIPTION OF VIETNAMESE COVERBS

The description of coverbs shows in a general way how coverbs behave in simple sentences, that is, sentences with one verb.

With the exception of the [+D] coverb, all the Vietnamese coverbs discussed here function as [+L] case markers; of these, one marks Location and the others are Goal directional markers, one of these being [+terminus]. The [+D] coverb marks DATIVE and BENEFACTIVE case relations. All the [+L] coverbs mark LOCATIVE and the directional [+L] coverbs can also mark DATIVE and TIME. With certain verbs, some of the directional [+L] coverbs mark a case relation which, pending further investigation, is called OBJECTIVE.

It is also shown that the coverbs of direction can function as post-verbal adverbs.

8.2 THE COVERB AS PREPOSITION

8.2.1 IN THE LEXICON

It is claimed in this study that a coverb is a preposition - defined as the word that occurs in exocentric construction with a noun phrase, forming a prepositional phrase, and that marks the case form of the PP construction. Each P has features in its lexical entry which show the case form it marks and the case relation that occurs with it.

Coverbs constitute a special class of prepositions in that each has a corresponding homophonous and synonymous verb. It is claimed that this kind of preposition is related to its corresponding verb by a synchronic derivation rule which operates on certain features in the lexical entry of the verb. (These certain features are discussed further in Sec. 8.3 below.) Thus, each coverb has the additional feature [+DERV].

The solution proposed here works for the facts of the language and is consistent with the notions of case relation and case form, which are assumed to belong to a universal grammar. The fact that there is already in the language a class of synchronically underived prepositions whose case marking functions in the same way as the coverbs makes it natural for the coverbs to be members of the class of prepositions. The [+DERV] marking on each coverb states that the coverb is homophonous and synonymous with its corresponding verb and satisfies native intuition that the coverbs are closely related to the verbs.

8.2.2 IN THE CLASSIFICATION OF VERBS

Verbs are classified according to their potential occurrence with various case relations. They are further subclassified by the case forms in which they take their respective case relations. As case markers, whose function is the realisation of case relations, prepositions play a large role in the classification of verbs. The occurrence of the [+D] coverb and the [+L] coverbs in the case frames of verbs makes it possible to distinguish three ditransitive classes, AGENTIVE-DATIVE (A-D) Goal, AGENTIVE-LOCATIVE (A-L) Goal, and A-L-Location, and one intransitive class, OBJECTIVE-LOCATIVE (O-L) Goal. The [+D] preposition (a coverb) and the Goal [+L] prepositions (also coverbs) can occur with A-D-Goal verbs; only [+L] Ps can occur with A-L verbs. The Direction [+L] Ps occur with O-L-Goal verbs, although there is one subclass of O-L-Goal verbs which may not occur with [+L] Ps (see discussion below in Sec. 8.3).

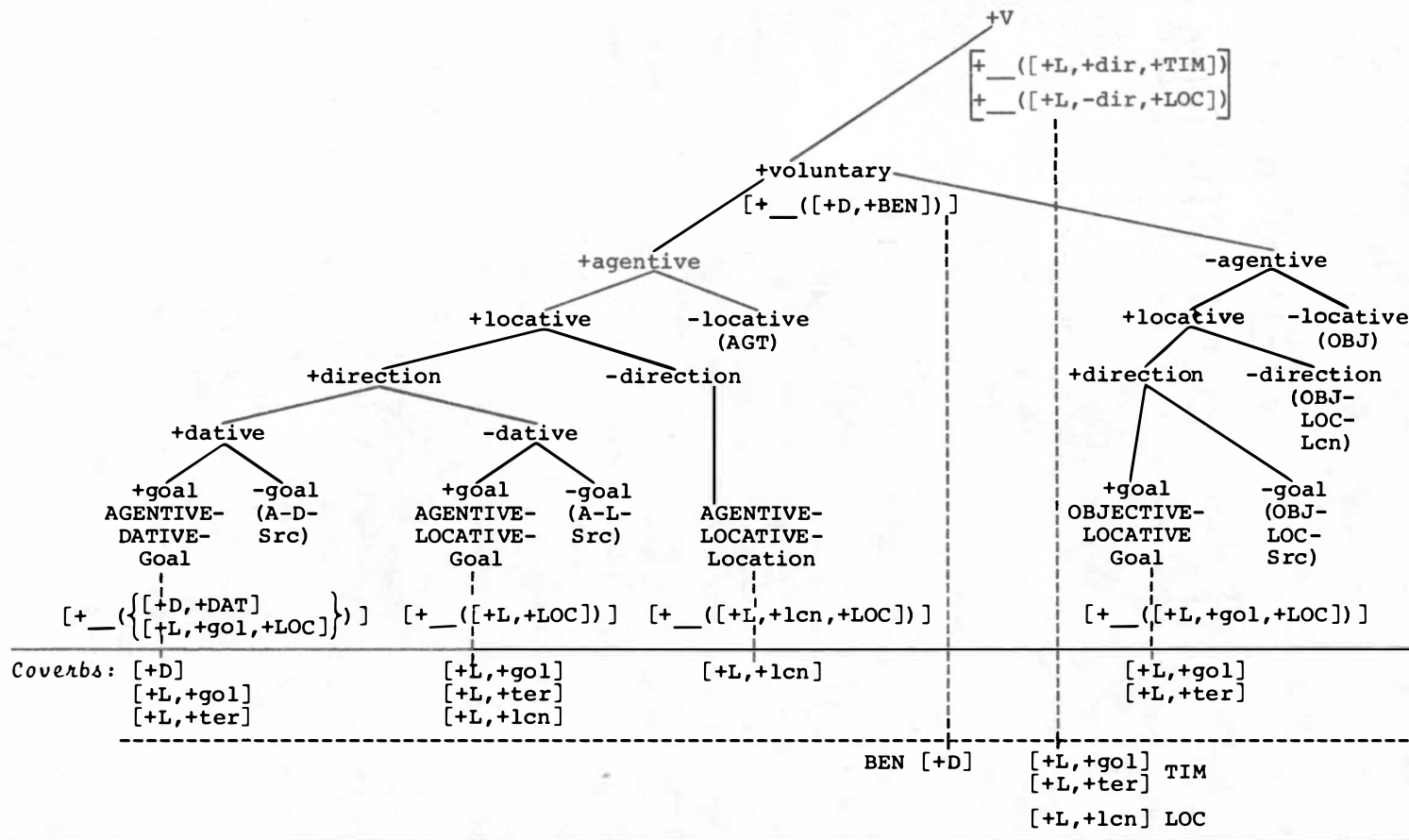


CHART VIII-1 Cooccurrences of Coverbs and Verb Classes

Verbs are broadly classified by their ability to take BENEFACTIVE, which may be marked by the [+D] P. All verbs may occur with TIME, which may be marked by the Direction [+L] Ps, and an outer Location LOCATIVE, which may be marked by the [+L,+lcn] P (a coverb).

The cooccurrences of coverbs and verb classes are shown in Chart VIII-1. Not included in the chart is the small class of verbs which can mark with Direction [+L] coverbs what is provisionally analysed as OBJECTIVE case relation. (See examples in Secs. 3.2.2.4.3 and 3.2.2.4.4, and Chart VI-2 in Sec. 6.2.3.2.)

The verb classes are represented in a semantic feature tree (cf. Chart III-4 in Sec. 3.3.6) in full capital letters; semantic features are signified by lower case letters. Those case frames which are directly relevant to the coverbs discussed in this study are shown for the various verb classes. The case form features of the individual coverbs are given below the classes of the verbs with which the coverbs can occur and connected to the verb classes with dotted lines. Those coverbs which occur with the "outer" case relations - BENEFACTIVE, TIME, and outer LOCATIVE - are set at a lower level. No underived Ps or their case forms are shown. One underived [+L] P - the [+L,+src,+extent] P - occurs with Goal verbs; it also occurs marking TIME. The [+L,+src,-ext] P occurs with Locative Source verbs. There is one underived [+L,+lcn] P, and a [+B] P which marks BENEFACTIVE.

8.3 LEXICASE AND COVERBS

The lexicase grammar has been found to be a satisfactory framework within which to describe and explain coverbs in Vietnamese. The verbs and sentences fall naturally into classes which can be described by environments which are specified in terms of case relations and case forms. Lexical features make statements about lexical items, defining their class membership, and lexical rules make generalisations about classes of lexical items, providing explanatory adequacy in a straightforward way.

One of the principal strengths of the lexicase model is that it assumes a less abstract underlying structure. It brings the base structure as close as possible to the surface while still capturing crucial generalities of the syntactic structure. This provides not only a more straightforward and simpler grammar but a less powerful grammar than one which postulates underlying elements which necessitate different levels and transformational rules to bring the levels together. Being less powerful, it can make a stronger claim.

Another strength is the rigorous constraint that a rule not be allowed unless it operates on features that define a natural class. This is particularly relevant to the problem of coverb derivation.

Given the analysis of coverbs as prepositions, the problem is how to relate them to their corresponding verbs. Ha (1970) considers the Direction coverbs (my [+L,+gol] coverbs) to be prepositions derived from verbs. Tran (1972) considers all the coverbs to be derived prepositions. Both Ha and Tran posit derivation rules which operate on *ad hoc* features of the verbs to derive the corresponding prepositions. Ha's feature to allow a verb to undergo the rule is [+co-prep]; Tran's is [+cvb]. Until recently, I took a similar approach but have now abandoned it because rules like Ha's and Tran's operate on features which are merely a notational equivalent for having a separate lexical entry. Such a rule gives only the appearance of capturing a generality if no independently motivated property of these verbs can be found to condition it.

If, however, these verbs share some intrinsic property which makes them a natural class, then it is valid to have a rule which operates on that intrinsic property. It has been found that there is such a property. Mentioned above in Sec. 8.2.2 is a subclass of O-L verbs which cannot take their LOCATIVES in the L case form. It happens that this very class corresponds to the class of [+L] coverbs, and the A-D verb which cannot take its DATIVE in the D case form corresponds to the [+D] coverb. Thus, a common feature defines these words as a natural class and allows a derivation rule which relates them.

One significant way in which the grammar in this study differs from many other generative grammars (cf. especially Fillmore 1968 and 1971b) is that it posits P as a basic category. This eliminates the necessity of transformational rules to introduce Ps into surface sentences. Perhaps more significant is the ability of the grammar to demonstrate the synchronic and historical relationships between Vs and Ps. A grammar which does not have P as a basic category cannot account for the facts of coverbs - their close relationship to their corresponding verbs and their probable historical derivation from verbs.

8.4 COVERBS IN SOUTHEAST ASIA

A limited investigation of Khmer and Thai has shown that these languages also have coverbs and that there are many similarities in the nature and behaviour of coverbs in the three languages. A comparison shows that most of the verbs and prepositions share similar meanings, that, to some extent, the prepositions mark the same case relations, and that all but the Location coverb are directional in nature. It is

interesting to note that only in Thai does the Source preposition still have a corresponding verb (although the verb occurs only rarely), so must be considered a coverb. There are some differences between the languages in restrictions of occurrences and some apparent counterexamples in Khmer and Thai to the coverb derivation hypothesis in my solution for Vietnamese. Most of these counterexamples have been found to be consistent with the hypothesis, due to distinguishing sub-CF features in the coverbs concerned. A much more comprehensive investigation is needed to clarify remaining problems and bring out more facts.

Further investigation into historical data and language typology is needed before the hypotheses concerning areal spread and historical development can be fully substantiated. Already, however, evidence from other languages gives support to the hypothesis that coverbs are prepositions at a stage in the historical derivation of prepositions from verbs.

8.5 PROBLEMS FOR FURTHER INVESTIGATION

There are some problems directly involving coverbs which have been only touched upon in this study and need much more investigation before a satisfactory analysis can be given. They include the following topics.

1. The derivational relationship between the verbs and prepositions and the use of these same words as adverbs modifying direction. (See Sec. 5.1.3 above.)
2. The nature and relationship of V and coverb *cho* when allowing following embedded verbs. The following sentences represent only two of several different structures.

chị-ấy cho tôi đi chơi
she give I go play
'She let me go play.'

họ ước cho nó vui (Liem 1969:67)
they wish for 3p happy
'They wish that he were cheerful.'

3. The case frame features of the Ps which allow following embedded verbs (P[^]S in the PS rules), as in

tôi nghĩ đến anh đang làm việc này
I think to elder Prog. do work this
(reaching) bro.
'I think about you doing this work.' (Thompson 1965a:232)

4. The case relation of the nouns which occur with a certain set of verbs which require Goal [+L] case markers, as in the following sentences. (Also see Secs. 3.2.2.4.3 and 3.2.2.4.4 above.)

tôi nhớ đến cô-ấy nhiều
I remember to she much

[+NM] [+L] [+AC]
[+DAT] [+ter] [?]

'I think about her a lot.'

Lan bảo tôi về việc đó rồi
tell I to? matter that already

[+NM] [+AC] [+L] [+AC]
[+AGT] [+DAT] [+gol] [?]

'Lan told me about that matter already.'

It has been suggested here that this is some kind of OBJECTIVE.

5. The nature of về in sentences such as the one above. Are về 'back to' and về 'concerning' two synchronically separate lexical entries, related by a historical derivation rule?

6. The nature of the V and P theo 'follow, following'. Is P theo a true coverb? What case form does it mark and what is the case relation of its cooccurring noun?

7. The relationship between the Source P khỏi and the verb khỏi 'avoid', which usually occurs with another verb, as in

anh khỏi phải đi (Nguyen D-H 1966:223)
elder avoid must go
bro.

'You don't have to go.'

8. The classification of the words xa 'far' and gần 'near', whether they are stative verbs, locative nouns, prepositions, a combination. Could they be [+lcn] coverbs? They have been tentatively analysed in this study as OBJECTIVE-LOCATIVE-Location verbs (Sec. 3.3.5.6), which appear to be stative.

9. The status of LOCATIVE phrases in existential sentences; for example,

ở Sài Gòn có nhiều xe-hơi
in have much automobile
'In Saigon there are lots of cars.'

There are, indeed, many questions involving LOCATIVE and the L case forms. What is the status and scope of abstract LOCATIVE? How general is [+L] - i.e. how many case forms should be subsumed under L as sub-CFs?

If [+D] (in this study) is actually a Goal [+L] sub-CF, is it possible to say that all coverbs, wherever they are found in the world, are [+L] case markers?

APPENDIX

ABBREVIATIONS

		<i>Relevant Section</i>
AC	Accusative	3.2.2.2
A-D	AGENTIVE-DATIVE	3.3.5.1
A-L	AGENTIVE-LOCATIVE	3.3.5.2
Adv	Adverb	3.1, 5.1.3
AGT	AGENTIVE	3.2.1.1
B	The case form associated with BENEFACTIVE	3.2.2.7
BEN	BENEFACTIVE	3.2.1.7
C	The case form associated with COMITATIVE	3.2.2.6
CF	Case Form	2.1, 3.2.2
CR	Case Relation	2.1, 3.2.1
Cl	Classifier	3.1
COM	COMITATIVE	3.2.1.6
Cvb	Coverb	4.1, 4.2, 5.1.1, 5.3, 5.4, 6.2.3.1, 7.1
D	The case form associated with DATIVE	3.2.2.3
DR	(Lexical) Derivation Rule	2.2.2, 2.2.3
CDR:	Coverb Derivation Rule	5.3.3
DAT	DATIVE	3.2.1.3

Det	Determiner	3.1
dir	Direction	3.2.1.0, 3.3.3, 3.3.4.1
ext	Extent	3.2.2.4.2, 3.3.5.2.2
FP	Final Particle	3.1
gol	Goal	3.2.2.4.3, 3.3.3, 3.3.4.1
I	The case form associated with INSTRUMENTAL	3.2.2.5
INS	INSTRUMENTAL	3.2.1.5
L	The case form associated with LOCATIVE	3.2.2.4
lcn	Location	3.2.2.4.1, 3.3.4.1
LOC	LOCATIVE	3.2.1.4, 3.3.4.1
loc	Locative	3.2.1.0, 3.3.3, 3.3.4.1
N	Noun	3.1
NM	Nominative	3.2.2.1
NP	Noun Phrase	3.1
Nr	(Locative) Relator Noun	3.2.3
Nu	Numeral	3.1
OBJ	OBJECTIVE	3.2.1.2
P	Preposition/Postposition In the languages discussed in this study, Vietnamese, Khmer, Thai, and Chinese, all Ps are prepositions.	3.1, 3.2.2.0, 5.3.1, 5.3.3, 7.1
PP	Prepositional/Postpositional Phrase	3.1
PS	Phrase Structure	3.1
Pl	Plural	3.1
poss	Possessive	3.3.5.1.2
Qu	Quantifier	3.1
RR	(Lexical) Redundancy Rule	2.2.2; e.g.: 3.3.2, 3.3.4.1
Rel	Relative Pronoun	3.1
+rel	+relation	3.2.3
S	Sentence	3.1

SR	(Lexical) Subcategorisation Rule	2.2.2; e.g.: 3.3.4.1
src	Source	3.2.2.4.2, 3.3.4.1
sub-CF	Sub-Case Form	3.2.2.4
ter	Terminus	3.2.2.4.4, 3.3.4.1
TIM	TIME	3.2.1.8
V	Verb	3.1, 5.3.3

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